RSS 2000 User Guide

Version 3.0

POLYCOM®

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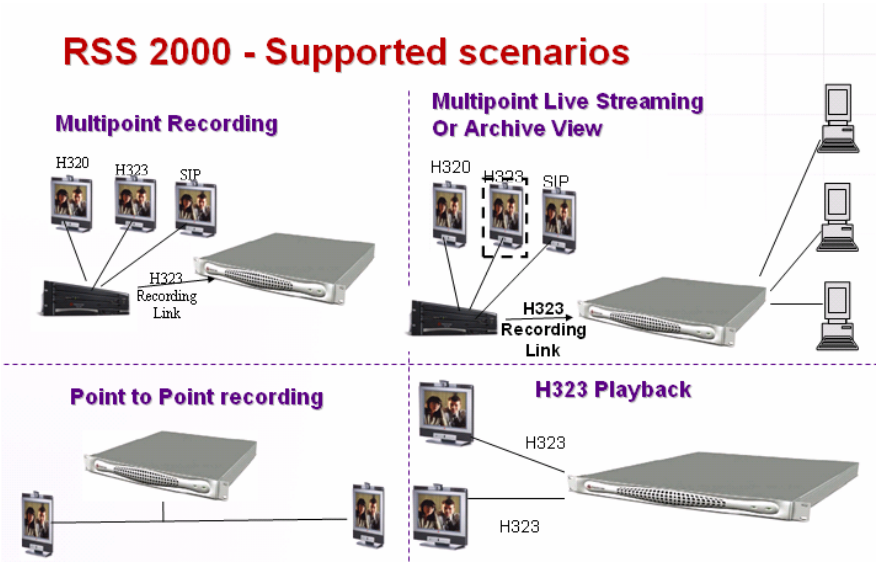
Preface

This User Guide provides system operation and setup information for users and administrators of the Polycom RSS 2000 system.

The RSS 2000 is a network server that enables users to easily record, stream and archive media content. It supports recording and archiving of high-definition video content, processing of streaming media, and H.323 playback. It is an important component of Polycom's peer-to-peer video communications product series.

The Polycom RSS 2000 can be fully integrated with other Polycom products (Such as the Polycom RMX 2000 and Polycom HDXs), and is compatible with devices supporting the H.323 standard. RSS 2000 uses easily remembered DTMF commands and Far End Camera Controls to start, stop, and pause recording, employ many other recording options, and perform H.323 playback. The device can produce superior recordings of multimedia conferences (as high as HD 30 frame/second under the H.264 standard) using synchronous sound, images, and content (point-to-point and point-to-multipoint), and transmit them to global audiences via the Internet for real-time viewing or replay. This server can store up to 600 hours of recorded content, and can use common media players such as Windows Media Player and RealPlayer. Moreover, The Polycom RSS 2000 Supports up to 50 Unicast streams in one single system.

The Polycom RSS 2000 also offers full-strength security functions. It supports SSL certification and encryption in order to protect the security of information transmitted from the web, allows the setting of recording and viewing access rights, and can identify individual video endpoints or network users.



1

RSS 2000 Installation and Preliminary Configuration

General Safety Precautions

Follow these rules to ensure general safety:

- Keep the area around the Polycom RSS 2000 unit clean, free of clutter and well ventilated.
- Decide on a suitable location for the RSS 2000 rack that will hold the RSS 2000 unit and is near a grounded power outlet.
- Use a regulating uninterruptible power supply (UPS) to protect the RSS 2000 unit from power surges and voltage spikes, and to keep it operating in case of a power failure.

***Table 1-1** RSS 2000 Hardware Specification*

Hardware Specification
Pentium 4, 2.8Mhz, 2G RAM,250G Hardisk. ▪ Form Factor: 1U 19” rack mount ▪ Height: 1.73” (44 mm) ▪ Width: 16.83” (430 mm) ▪ Depth: 15.35” (390 mm) ▪ Gross Weight: 22.4 lbs (10.2 kg) ▪ Power Supply: Thermal controlled 220W ATX AC power supply w/PFC ▪ AC Voltage: 100 - 240 VAC, 60-50 Hz, 5-3 Amps XP OS

Preparations

Obtain the following information from your network administrator:

- RSS 2000 unit, Subnet Mask and Default Gateway IP addresses.
- Gatekeeper IP address, Prefix, and E.164 of the RSS 2000.

Unpacking and Installing the RSS 2000

1. Place the RSS 2000 unit on a stable flat surface in the selected location.
2. To connect to the power source, insert the power cable into the Power connector on the rear panel of the RSS 2000 unit and insert the Power cable into the power source socket.
3. Connect the LAN cable to LAN 1 port on the rear panel of the RSS 2000 unit.
4. Turn on power switch.

Figure 1-2 Cables Connection

Initial RSS 2000 IP Configuration

The system is shipped with a default IP address:

IP Address: 192.168.1.254

Subnet Mask: 255.255.255.0

Gateway: 192.168.1.1

There are two ways to change the initial IP address of the system:

- Via a cross over LAN cable
- Via a RS232 or Telnet Console.

Changing the initial IP address via a cross over LAN cable

1. Connect a cross over LAN cable to LAN 1 port on the rear panel of the RSS 2000 unit..
2. Configure your PC to the same segment of the RSS 2000. For example, set the IP address as that shown below:

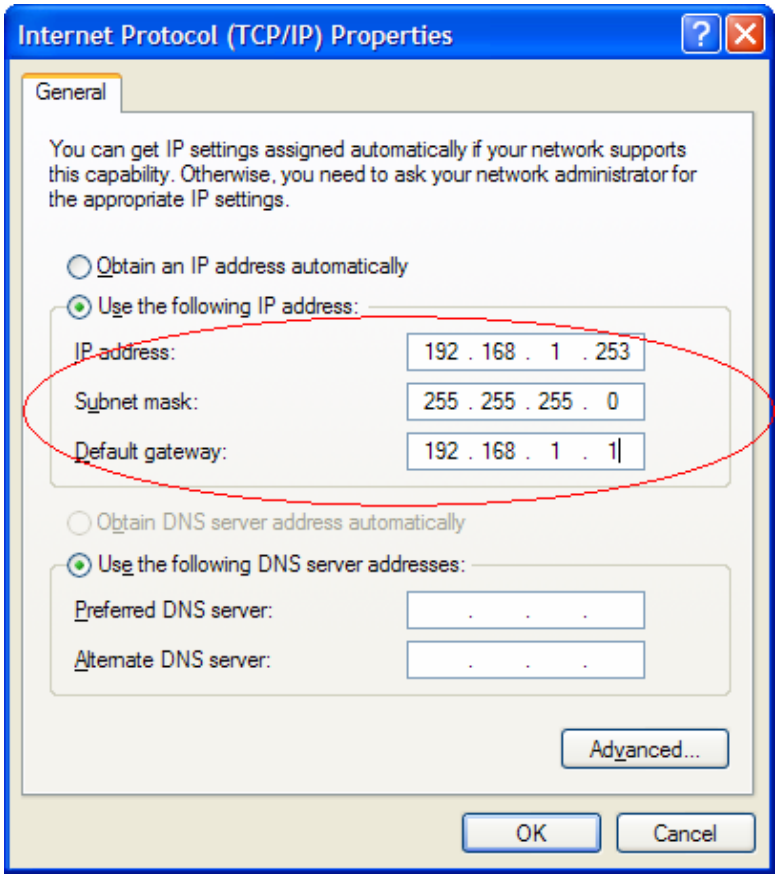

Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 1 . 253
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 1 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Figure 1-3 PC IP Address Settings

3 Open the internet explorer and browse to: http://192.168.1.254

4 Login to the system. Use the default User name (**Administrator)** and Password (**polycom)**.

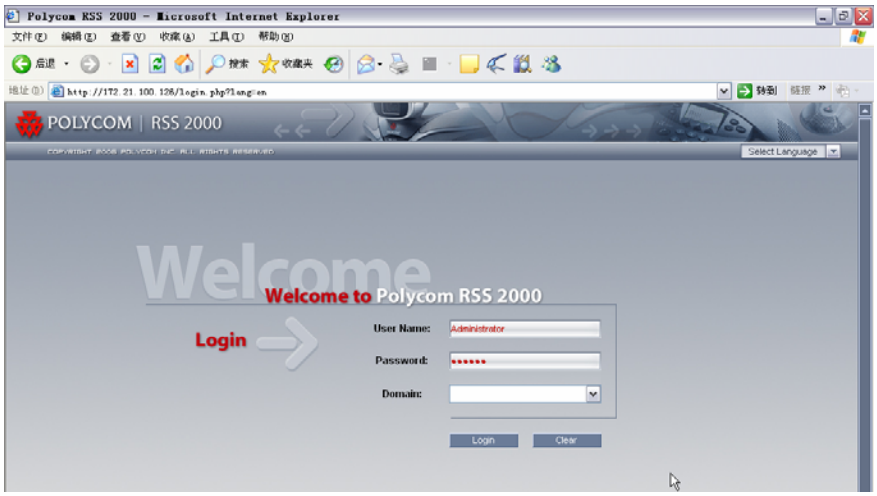


Figure 1-4 Login to Web UI

5 Go to **system configuration->IP setting** and modify the IP address, the user can set a static IP or choose DHCP. Click the **save** button and then reset the system.

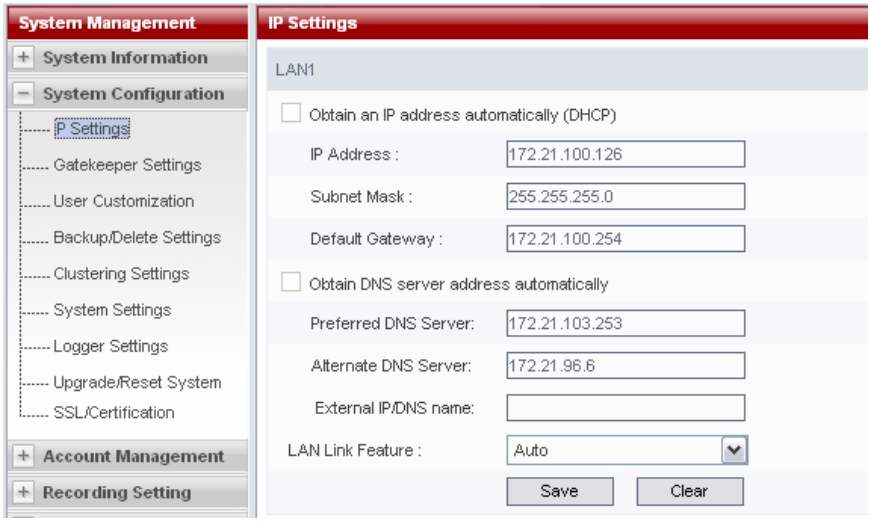


Figure 1-5 IP Settings Page

Changing the initial IP address via an RS232 Console or Telnet

Another option to modify the IP address of the RSS 2000 is using the RS232 console.

1. Connect to the RS232 port – and activate the console (9600, 8bits).
2. When login to the console, input the default password **polycom** to enter the system.
3. After the user have logged onto the system, enter "?" or "help" after the "#" to show the following information:

```
#?
Available commands:
show Show system information.
reset password Reset the administrator's password to default.
set lan1 static <ip address> netmask <ip mask> [gw <gateway
address>]
```

4. Change the IP address using the command in below format (the exact addresses are just for a instance):

set lan1 static 172.21.100.20 netmask 255.255.224.0 [gw 172.21.96.254]

- The same steps apply also for Telnet connection.
- Only one console can be connected at any given time (either Telnet or RS232 not both).

The system is now ready for use, the following chapters will give further descriptions for device configuration and operation.

2

Web User Interface (UI)

The RSS 2000 provides two types of user interface:

- Web UI - Web Interface to configure, control, monitor RSS 2000 and view archives.

  The following operations can be performed using the Web UI: querying system information, activation/upgrading, registering to a gatekeeper, performing customization, backup/deletion of recording files, configuration of clusters, configuration of multicast videos, configuration of SSL certificates, setting of single point recording and point-to-point recording parameters, account management, management of recorded files, dial-out and record sessions initiated from the RSS, and more. This chapter provides a detailed explanation of Web management and configuration.

- Onscreen UI - User menu which displayed when connecting to the RSS via the H323 Endpoint (Or MCU), the onscreen UI allows the user to perform recording and playback tasks. The following two chapters will explain how to use the onscreen UI to perform recording and playback.

A user's PC must satisfy the following conditions in order to successfully work with the RSS 2000's Web UI and play video files:

- Must use Windows 2000 SP4, Windows XP SP2, Windows 2003 or Windows Vista operating systems.
- Video player clients are Windows Media player 9.0 (or above) or Real Player.

Logging into RSS 2000 via the Web

Enter the RSS 2000's IP address in the address field and press enter. The user will see the RSS 2000's login page, as shown in Figure 2-1.

After correctly entering a user name and password in the login screen, press enter to log in. The default user name is "**Administrator**" and the default password is "**polycom**". These defaults are pre-set for use in first-time log in. A single click on a blank part of the screen will clear the entered user name and password, allowing new values to be entered.

Figure 2-1 RSS 2000 login screen

If the RSS 2000 you are logging into is integrated with an LDAP Active Directory server, users can also enter an Active Directory domain user name and password in the login screen. In this case, the "Domain" menu in Figure 2-1 will be enabled. Enter a correct user name and password, and select the appropriate domain name from the "Domain" pull-down menu; click the "Login" button or press enter to log in. Please refer to the *Active directory settings* section for detailed information concerning Active Directory servers.

RSS 2000 Web UI Main screen

Figure 2-2 RSS 2000 Web UI Main screen

The RSS 2000 Main screen includes three major sections:

1 **System Management –** This section includes the following sections: System Information, System Configuration, Account Management, Recording Setting, Archives and Live Streaming.

2 **Monitoring –** The right section to the System management, the information in this window will be changed based on the menu selection in the system management.

3 **Connected H.323 Link Status –** Monitor and control area for the H.323 devices which connected to the RSS 2000 at any given time.

System Information

After logging in to Web page, the default view will display the "System Information". This page displays product information, system usage, and activation status.

Product Information

Click on "Product Information" to view the RSS 2000's system name, product type, version, maximum H.323 connections, maximum archive viewers, maximum recording sessions, and activation status, as shown below.

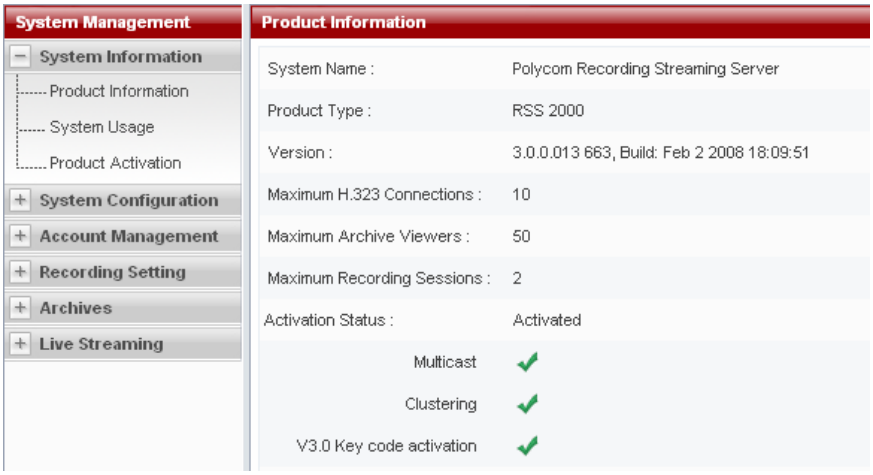


***Figure 2-3** Product Information Page*

***Table 2-1** Product Information Details*

Item	Details
System name	Displays the current RSS 2000 device name.
Product type	Displays the video server type (RSS 2000).
Version	Displays the current version and distribution date.
Maximum H.323 Connections	Displays that the RSS 2000 can support a maximum of 10 H.323 playback connections.
Maximum Archive viewers	Displays that the RSS 2000 can support a maximum of 50 users simultaneously connected to Web UI to play videos.
Maximum Recording	Displays that the RSS 2000 can support simultaneous

Item	Details
Sessions	recording by 2 endpoints. This implies that it can support either two single-point recording sessions or one point-to-point recording session.
Activation Status	Displays whether the RSS 2000 has been activated. This field will show "Not activated" when the device has not been activated after a software upgrade, and will otherwise show "Activated". Only an activated RSS 2000 can perform normal recording. Please refer to the *Product activation* section for detailed information concerning activation.
Multicast	Displays whether the multicast function is activated. When the multicast module is activated ✔ is displayed. Configure multicast parameters in the "Recording parameters-> multicast settings" page. See *multicast settings* for details. When not activated, ⊘ is displayed. To use the multicast function, acquire a multicast-activated product key code. Steps for activating the multicast function are the same as those for new device activation. Please refer to the *Product activation* section for further information.
Clustering	Shows whether the device's clustering function has been activated. When the network includes several RSS 2000 devices, you can use the clustering function on one RSS 2000 to play video files stored on other RSS 2000 servers. ✔ will be shown here when the clustering function has been activated. Clustering parameters can be set via "System configuration-> Clustering settings". Please refer to the *Clustering settings* section. If the clustering function has not been activated, ⊘ will be shown here. To use the clustering function, you must re-activate the device using an activation code containing the clustering function. Clustering function activation involves the same steps as new device activation; please refer to the *Product activation* section for further information.
V3.0 Key code activation	Shows whether Version 3.0 is activated for this system. When the RSS 2000 has been activated successfully using the Upgrade Key code for version 3.0, ✔ will be shown here, otherwise ⊘ will be displayed.

System Usage

Click on "System Usage" in the navigation bar on the left side of the screen to view the RSS 2000's current hard drive usage, CPU usage, current device time, and synchronization of device time and time on current computer.

Figure 2-4 *System Usage Page*

Table 2-2 *System Usage Details*

Item	Details
Hard drive usage	Displays the RSS 2000's current hard drive resource usage.
CPU usage	Displays the RSS 2000's current CPU usage.
Date & time	Displays the RSS 2000's current date and time.

This screen is automatically refreshed once in every 30 seconds.

Product Activation

The user must activate an RSS 2000 after purchase or software upgrade before the user can perform normal recording. Click on "Product Activation" in the navigation bar on the left side of the screen to enter the product activation interface, as shown below.

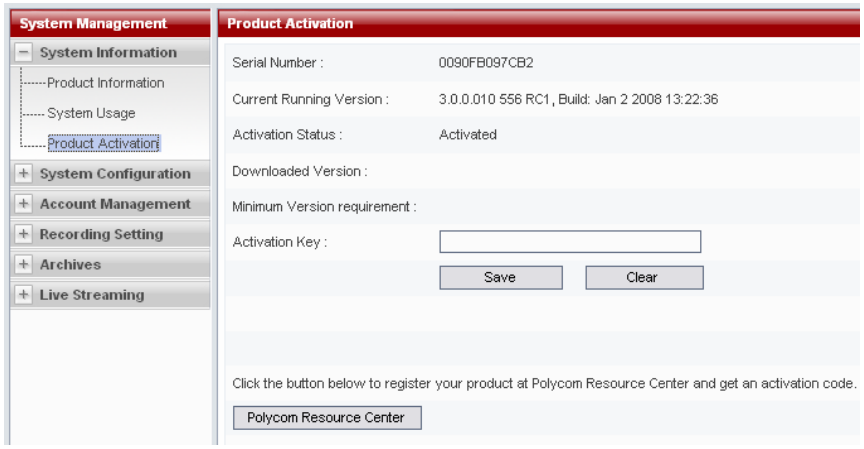


Figure 2-5 *Product Activation Page*

Table 2-3 Details of Activation Configuration Items

Item	Details
Serial number	Displays the RSS 2000's product serial number.
Current running version	Displays the system software version currently installed on the RSS 2000.
Activation status	Displays whether the RSS 2000 has been activated. Will show "Not activated" when the device has not been activated, and will otherwise show "Activated".
Downloaded version	Displays the version of system software that has been uploaded to the RSS but not yet used in upgrading the system software. No message will be displayed here after successfully upgrading.
Minimum version requirement	Displays the minimum software version required by the device when downloading software for upgrading. Upgrading cannot be performed if the current version on the device is lower than the minimum required version. No message will be displayed here after successfully upgrading.

Activation of a newly-purchased RSS 2000

After the user purchase a new RSS 2000 server, he must obtain the device's **Key Code** and **Upgrade Key Code** from the Polycom Resource Center before the user can activate the device. Only an activated RSS 2000 can perform normal recording. The following are the specific activation steps:

Step 1 – Get a Key Code for the Basic, Multicast or Clustering Functions Activation

1. Click on the "Polycom Resource Center" button to enter the Polycom Resource Center login page.
2. Enter your Email address and password in the login box, and then click on Sign In. If you are a new user, click on the "Register for An Account" link to register and obtain a login password.
3. After successfully registering, click on "Service & Support" in navigation bar on top of the screen, then click the “Product Activation” in the navigation bar on the left side of the entered page, as shown in below figure.

Figure 2-6 Service & Support Page

4 Enter the *Activate Your Product* page. Enter the device's license number and serial number in the "Single License Number" area, and then click on the "Generate" button, as shown below. A Key Code will be displayed in the "Key Code" area. You can find the device's license number and serial number among the documents (single page) on your RSS 2000, and you can also obtain the serial number on the product activation page, as shown in Figure 2-5.

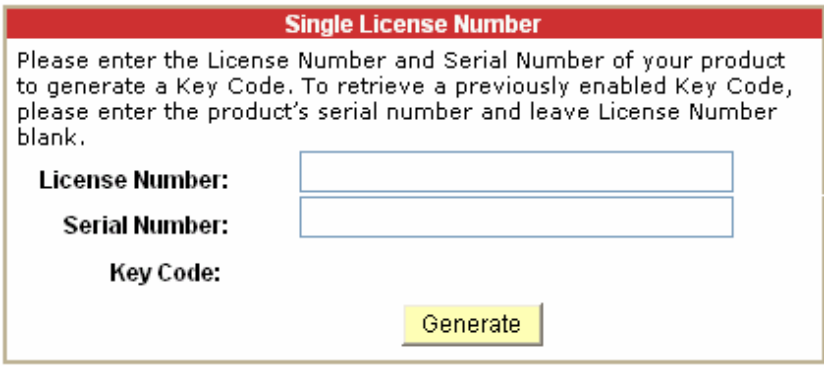

Single License Number
Please enter the License Number and Serial Number of your product to generate a Key Code. To retrieve a previously enabled Key Code, please enter the product's serial number and leave License Number blank.
License Number:
Serial Number:
Key Code:
Generate

Figure 2-7 Single License Number Section

5 Enter the generated Key Code in the "Activation Key" input box shown in Figure 2-5, then press the "Save" button to activate the basic, multicast or clustering functions of RSS 2000.

- If you wish to activate the device's multicast module or clustering module alone, you must first obtain a product license with these functions. Please contact a distributor if you wish to obtain such a license.
- Activating the device's multicast module or clustering module involves exactly the same steps as Step 1 - Get a Key Code for the Basic, Multicast or Clustering Functions Activation.

Step 2 – Get an Upgrade Key Code for the Software Version Activation

1 Click on the **Retrieve Software Key Code** button in the "Software

Upgrade Key Code" area.

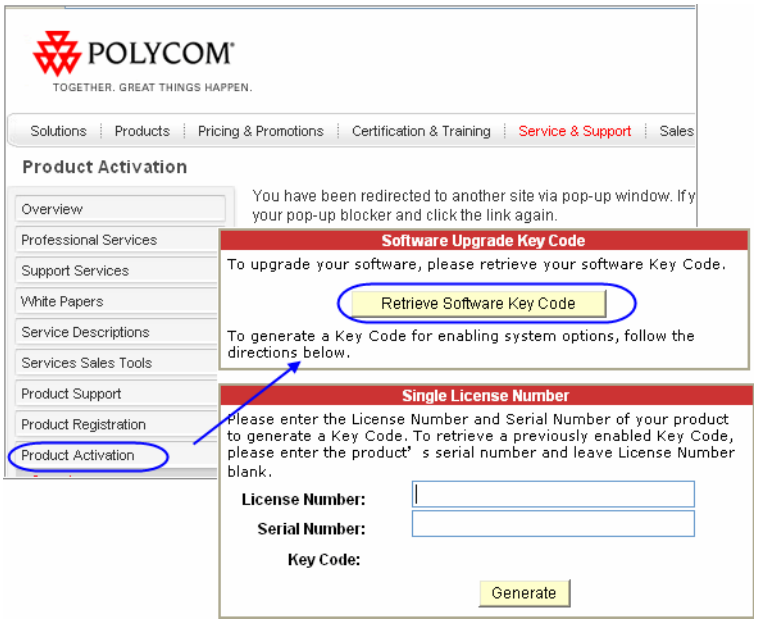


Figure 2-8 Software Upgrade Key Code Section

2 Enter the device serial number and version number in the "Single Upgrade Key Code" area (you can obtain the serial number on the product activation page, as shown in Figure 2-5), then click on the Retrieve button to generate a system Upgrade Key Code.

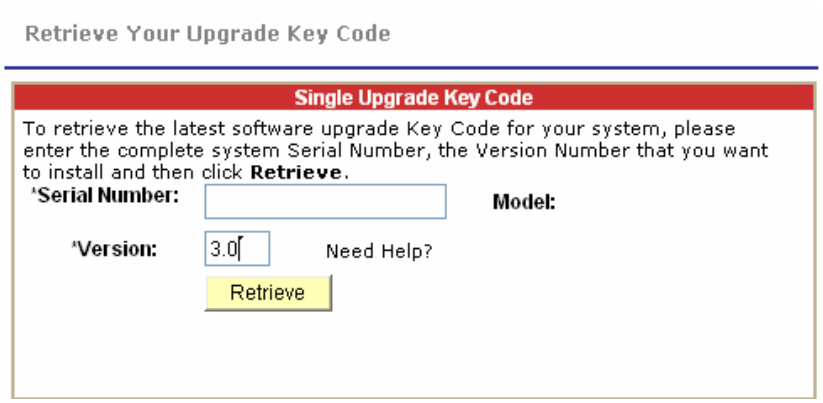

Retrieve Your Upgrade Key Code
Single Upgrade Key Code
To retrieve the latest software upgrade Key Code for your system, please
enter the complete system Serial Number, the Version Number that you want
to install and then click Retrieve.
*Serial Number:
Model:
*Version:
3.0
Need Help?
Retrieve

Figure 2-9 Single Upgrade Key Code Section

3 Enter the Upgrade Key Code in the "Activation Key" input box shown in Figure 2-5, then press the "Save" button to activate the software version of RSS 2000.

Step 3 - Verify the Activation Status

After entering both the Key code and the Upgrade Key code the product will be ready to be used. Following successful activation, the "Activation status" property in *Product Information* page will display "Activated" and a ✔ will appear in the "V3.0 Key code activation" property. If you also purchase the multicast function or clustering function when you buy a new device, a ✔ will appear in the "Multicast" or "Clustering" properties sections, as shown below.

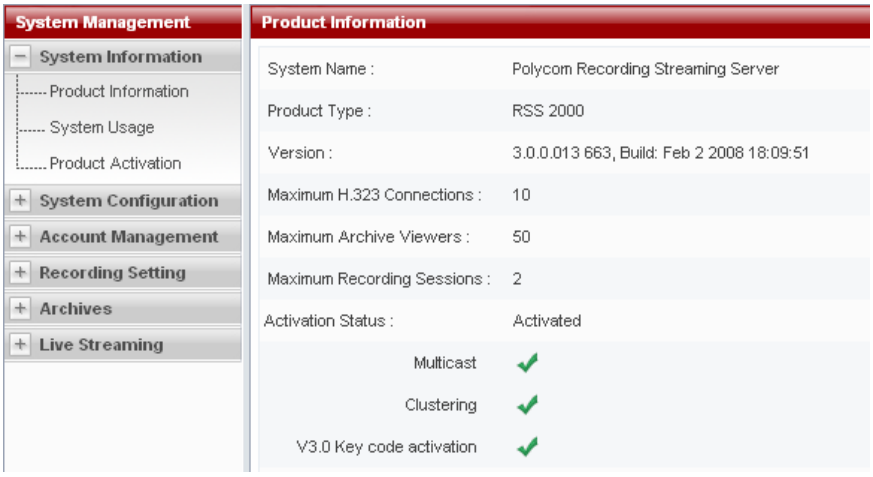


Figure 2-10 The newly-purchased RSS 2000 has been activated successfully

System Configuration

Click on "System Configuration" in the navigation bar on the left side of the screen. This page can be used to perform basic configuration tasks, including IP settings, gatekeeper settings, user customization, device clustering settings, system settings, logger settings, upgrade/system reset settings, and SSL encryption certificate configuration.

IP Address Settings

Click on "System Configuration" -> "IP Settings" in the navigation bar to enter the IP settings page. The LAN1 IP address, subnet mask, gateway, and DNS server can be set using this page.

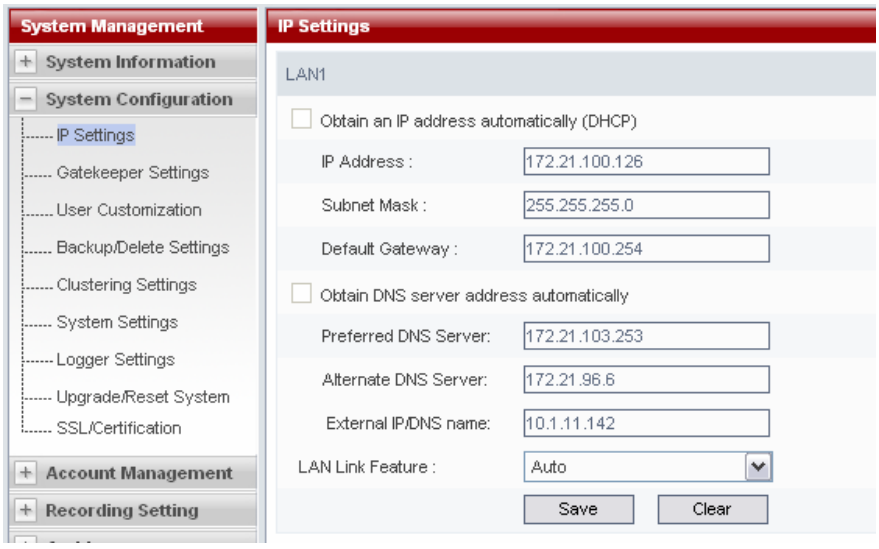


Figure 2-11 IP settings page

The fields "Obtain an IP address automatically (DHCP)" and "Obtain DNS server address automatically" may be used on future versions of RSS 2000 software, but are currently disabled.

The device's IP address, subnet mask, default gateway, and DNS server address can be set manually on this page. A maximum of two DNS servers

can be set. After completing settings, click on the "Save" button to save the IP address and DNS server address, and a dialog box will appear to remind the user that the system required to be restarted in order for the new settings to take effect. After restart, the new IP address must be used to visit the Web UI to perform management.

When setting the IP address, only dots and numbers within the scope of 0-255 can be entered for the IP address, subnet mask and gateway address. Please check that an entered address is valid, otherwise an error message box will pop up.

Gatekeeper Settings

Click on "System Configuration" -> "Gatekeeper settings" in the navigation bar to enter the gatekeeper settings page. This page is used to configure whether the device registers to a gatekeeper. After registering to a gatekeeper, endpoints may call the RSS 2000's E.164 alias to establish a connection, and there will be no need to use a cumbersome IP address.

Gatekeeper configuration items will be enabled when this box is checked. The parameters that are set on this page will differ depending on the different types of gatekeepers. The word "Registered" will appear next to the check box after successfully registering to a GK.

Figure 2-12 Gatekeeper setting page

Registering to other gatekeepers

If the gatekeeper is not a Cisco, Polycom PathNavigator, Polycom SE200, or Radvision gatekeeper, the user must set the items in the following table.

Table 2-4 Details of Gatekeeper Settings - Ordinary GK

Item	Details
Gatekeeper IP Address	Enters the IP address of the GK the user wishes to register to.
System prefix/E.164 number	Sets E.164 alias of the RSS 2000. After registering, endpoints may use this E.164 to call the RSS 2000. The entered E.164 must have a numerical value and may not exceed 16 digits in length; otherwise an error message will pop up.

Item	Details
System H.323 Alias	Sets the H.323 alias of the RSS 2000. After registering, the endpoint will use this H.323 Alias to call the RSS 2000. The entered length cannot exceed 16 digits.
Gatekeeper Port	The default value of 1719 typically does not need to be changed.
Gatekeeper Registration Mode	Selects the type of the gatekeeper the RSS 2000 will register to. If not a Cisco/PN/SE2000/Radvision gatekeeper, select the mode of "Others-no hunting".

Registering to a Cisco/PathNavigat/SE200/Radvision gatekeeper

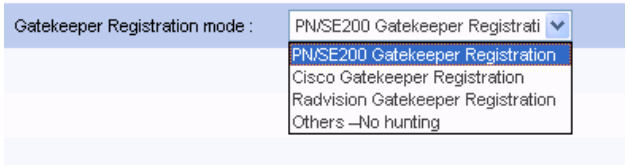
If the device is registered to a Cisco, PathNavigator, SE200 or Radvision gatekeeper, endpoints will be able to quickly access the RSS 2000's Onscreen UI record or playback interfaces using the record and play prefixes registered with the GK.

Furthermore, the RSS 2000 can also integrate with a gatekeeper, and take advantage of registration of identical system prefixes to enable multiple RSS 2000 devices to share recording resources or H.323 connections. When an endpoint calls an E.164 alias plus a play prefix or recording prefix to connect with an RSS 2000 device, the RSS 2000 can determine the H.323 connection request type. If resources are not available, the RSS will send a busy message to the requesting GK. The GK will in turn send the playback or record request to the next available RSS 2000 device with the same prefix, and the user can play back or record a video on another RSS 2000 without having to disconnect and reconnect.

When registering to a Cisco, PathNavigator, SE200 or Radvision gatekeeper, the user must set all the parameters in Table 2-4, and must additionally set the parameters in the following table.

***Table 2-5** Deatils of Gatekeeper Settings - Cisco/PN/SE200/Radvision GK*

Item	Details
Recording without H.239 Prefix	Sets the recording prefix of the RSS. The user can directly enter the device's single point recording menu when the endpoint calls the E.164 alias + recording prefix. The RSS 2000 will identify the recording request on the basis of this prefix.
Play Prefix	Sets the play prefix of the RSS. The user can directly enter the device's video play menu when the endpoint calls the E.164 alias + the play prefix. The RSS 2000 will identify the playback request on the basis of this prefix.
Recording with H.239 Prefix	Sets the H.239 dual stream recording prefix of the RSS. The user can directly enter the device's single point record menu when the endpoint calls the E.164 alias + H.239 prefix. The RSS 2000 will identify the dual stream recording request on the basis of this prefix.

Item	Details
Gatekeeper Registration Mode	 Selects the type of the gatekeeper the RSS will register to. ▪ **PN/SE200 Gatekeeper Registration** - Select this if a PN/SE200 GK is used. When a PN/SE200 GK is used, the RSS 2000 will determine that connection and recording resources are fully allocated: – When 10 H.323 playback connections are utilized, the RSS 2000 will send a busy message if it receives an endpoint's playback or record request, and the GK will transfer the endpoint's request to the next available RSS with the same prefix. – When 2 single point recording sessions or 1 point-to-point recording session is underway, the RSS 2000 will send a busy message if it receives an endpoint's record request, and the GK will transfer the endpoint's request to the next available RSS with the same prefix. – When 1 single point recording session with two streams is underway, the RSS 2000 will send a busy message if it receives a dual stream record request, and the GK will transfer the endpoint's request to the next available RSS with the same prefix. ▪ **Cisco Gatekeeper Registration** - Select this if a Cisco GK is used. When a Cisco GK is used, the RSS 2000 will only determine if connection resources are fully allocated, and will transfer the endpoint's playback or record request when 10 H.323 connections are fully allocated and a busy message has been reported. ▪ **Radvision Gatekeeper Registration** - Select this if a Radvision gatekeeper is used; the functionality is the same as for a PN/SE200 gatekeeper. ▪ **Others- No hunting** - This mode can be used for basic gatekeeper functionality. In this mode, the RSS2000 does not support any advanced calling functions like forwarding or prefixes. Only simple E.164 alias dialing is available.

After completing relevant settings, click on "Save" to perform registration. "Registered" will be displayed if the registration is successful, otherwise "Not registered" will be shown.

User Customization

The RSS 2000 permits users to customize the system's IVR voice messages, Web page logos, login screen welcome message, endpoint menu background, and endpoint menu language.

Click on "System settings-> User customization" in the navigation bar on the left side of the screen to enter the customization interface.

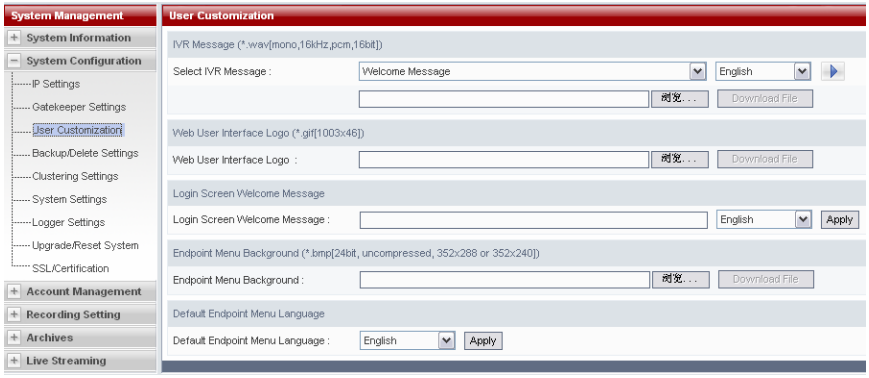


Figure 2-13 *User customization screen*

Customizing the IVR Messages

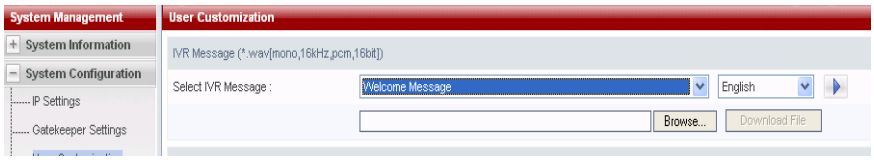


Figure 2-14 *IVR Message setting section*

Users will hear different IVR messages when operating the RSS 2000. The user can change the system's IVR messages in the "IVR message" area on this interface.

- When an IVR file is uploaded to the RSS 2000, the file name must consist of only alphanumeric characters.
- The file format is PCM, 16 bit, single-channel file with a sampling frequency of 16KHz.

After changing IVR messages, the user can select the corresponding language and click on the play button to the right to listen。

If the user wish to change the IVR messages, first select the corresponding language, and then click on the "Browse" button beneath the drop-down list. Confirm the path of the file to be changed, and click on the "Download file" button to download the new file. After the file has been downloaded, play the message to confirm that the file change has been successful.

Customizing Web user interface logos

Figure 2-15 *Web user interface logo setting section*

The user can change Web interface logos in the "Web user interface logo" area of the interface.

Logo image files must have file names consisting only of alphanumeric characters; the file format must be GIF and file size must be 1003 × 46.

Click on the "Browse" button in this area, confirm the path of the file to be changed, and click on the "Download file" button to download the new file. After the file has been downloaded successfully, the system's logos will be replaced with the new logos.

Customizing the login screen welcome message

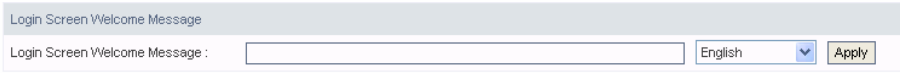


Figure 2-16 Welcome Message setting section

The user can change the login interface welcome message in the "Login screen welcome message" area of the interface.

Enter the text of the new welcome message in the "Login screen welcome message" input box, and select the system software language version. Click on the "Apply" button to change the Web login screen welcome message.

Customizing the endpoint menu background

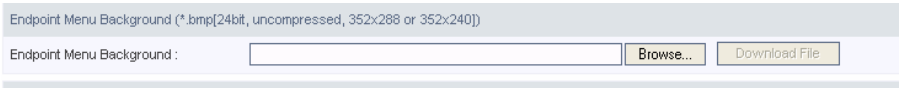


Figure 2-17 Endpoint menu background setting section

The user can change the endpoint menu background image in the "Endpoint menu background" area of the interface.

Endpoint menu background image files must have names consisting only of alphanumeric characters; images must be in bmp format, and must have a resolution of SIF (320 × 240) or CIF (352 × 288).

Click on the "Browse" button in this area, confirm the path of the file to be changed, and click on the "Download file" button to download the new file. After the file has been downloaded successfully, the endpoint menu background will be replaced with the downloaded image file, as shown below.

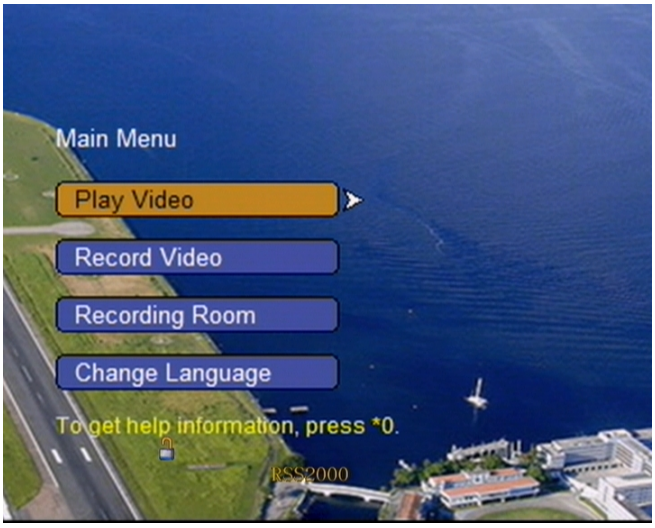


Figure 2-18 Endpoint menu after changing the background image

Setting the default endpoint menu language

Figure 2-19 Default endpoint menu language setting section

After the endpoint is used to call and establish a connection with the RSS 2000, the menu screen sent from the RSS 2000 will appear on the endpoint. The default endpoint menu language can be set to any of 12 languages, including simple/traditional Chinese, English, Japanese, Korean, Russian, Italian, German, French, Spanish, Portuguese and Norwegian using the Web interface.

The default endpoint menu language can be set using the "default endpoint menu language" area. Select on the languages and single-click the "Apply" button to change the endpoint menu language.

Changes to the menu language will take affect on the next H.323 Connection to the RSS 2000.

Archives Backup/Delete

Click on "System Configuration -> Backup/Delete Settings" in the navigation bar to enter the screen shown below. This interface can be used to configure backup and deletion of recorded video files.

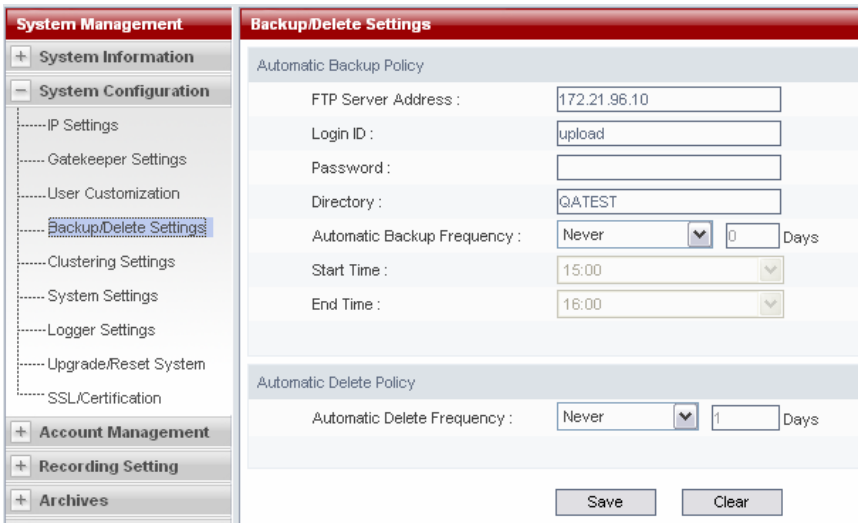


Figure 2-20 Backup/deleterious settings screen

The user should configure a FTP server in where he would like back up the archives to. The configurations include the FTP Server Address, Login ID, Password and Directory.

Backup Settings Policies

There are three options with regard to automatic backup frequency:

- **Never backup** – Video files will not be backed up to the FTP server if this is selected.

- **Backup after end of recording** – Video files will be immediately backed up to the FTP server if this is selected.
- **Backup after a specified number of days**- Video files will be backed up to the FTP server at a configured frequency if this option is selected. The backup time must be set. Specify the number of days after recording, and the backup start time on that day. The number of days may be any value in the range of 0-100, and any time may be set from 0:00 to 23:00; the backup end time must be later than the backup start time.

The file names of archives that have been backed up will be displayed in pink in the archive list.

Deletion Policies

There are three possible deletion policies that can be selected:

- **Never delete** – Video files will be stored indefinitely on the RSS 2000's hard drive when this option has been selected.
- **Delete after backup** – Video files will be immediately deleted after being sent to the backup server when this option has been selected.
- **Delete after a specified number of days** – Sets the number of days after the end of recording before video file are deleted; the number of days may be any value in the range of 0-100.

If "Never Auto Delete" is enabled on the video file properties screen (please refer to Changing Archive Properties section), the video file will not be deleted even if the backup/delete strategy allows deletion.

Clustering Settings

To facilitate the preview or play of recording files stored on RSS 2000 devices on the network, the RSS 2000 provides a device clustering function. After enabling the device clustering function and correctly setting clustering parameters, users can use an RSS 2000 to play video files stored on other RSS 2000 devices. Click on "System Configuration -> Clustering Settings" in the navigation bar on the left side of the screen to enter the clustering settings interface.

Figure 2-21 Clustering settings screen

There are two ways of setting RSS 2000 clustering: automatic clustering and manual configuration:

- **Auto discovery** is suitable for clustering several RSS 2000 devices on a single subnet. When clustering devices, the RSS 2000 will automatically find all other RSS 2000 devices on the same subnet and possessing the same group name configured in the "Clustering group name" settings and will make those devices members of its own group. Any device in a group can play back files stored on other devices in the same group.
- **Manual configuration** is suitable for clustering RSS 2000 devices on different subnets. The master/slave relationship between the clustered RSS 2000 devices will now be configured in accordance with their actual network linkage, that is, configure one RSS 2000 device which is accessible via router to all of other RSS 2000 devices as a master device, and others are slave devices. In these circumstances, a device can access the master RSS 2000 and play back recordings stored on the master and other clients.

Table 2-6 Details of Clustering Configuration Items

Item	Details
Enable device clustering	Enables the device clustering function. Devices will not use the clustering function when this box is not checked. In that case, RSS 2000 devices on the network will only be able to preview or play video files on their own hard drives, and the other settings on this screen will not be enabled. The clustering function will be enabled when this box is checked.
Clustering group name	The clustering group name is only effective when auto discovery is used.
Auto discovery	Determines whether the device uses automatic clustering to discover video files on other RSS 2000 devices. Auto discovery will be enabled when this box is checked. In that case, the "Master device address" box cannot be edited. The device will employ manual configuration when this box is not checked. In that case, the IP address of the master RSS 2000 device must be entered on the client device.
Master device address	The IP address of the master RSS 2000 device in the clustering group. If the current device is the master device, this field can be left blank.

- When viewing videos stored on external RSS 2000 devices using clustering, only videos configured for "Full permission" can be viewed.
- Videos stored on external RSS 2000 devices cannot be deleted via clustering, and their video properties cannot be edited.

System Settings

Clicking on "**System Configuration -> System Settings**" in the navigation bar on the left side of the screen allows the user to configure items describe in Table 2-7.

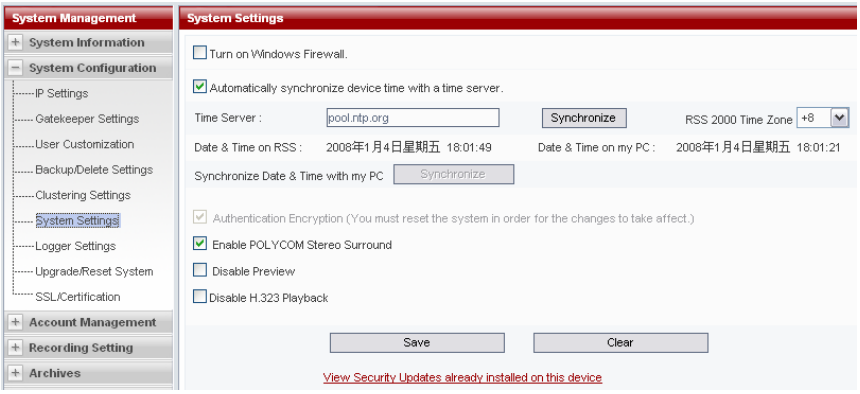


Figure 2-22 *System Settings Page*

Table 2-7 *System Settings Details*

Item	Details
Turn on Windows Firewall	Turn on or turn off the RSS 2000 system's firewall. Enable the Firewall will prevent the system from illegal internet invasion.
Automatically synchronize device time with a time server	When checked, the device time will be automatically synchronized with the set time server. The administrator must set the location of the time server. Clicking on the "Synchronize" button will synchronize the device time with the time server. When unchecked, the RSS 2000's device time will be synchronized with the time of the local PC by clicking on the "Synchronize" button. ▪ Time Server – Sets the location of the time server. It can be a DNS name or an IP address. When setting to a DNS name, ensure that the configured DNS server is able to resolve the name. ▪ Time Zone – Sets the time zone for the RSS 2000 system time.
HTTPS/SSL	Sets whether or not SSL authentication encryption is activated for communication between the web server and the users. After changing this setting, the device must be restarted for the new setting to take effect. If the user purchased an activation code with security mode and used it to activate the device, then this item will be disabled. It will not permit the user to turn off the authentication function in order to protect secure web communications. After turning on the authentication encryption, the SSL certificate on the server must be configured. For more detailed information, please refer to*SSL Configuration*.
Enable POLYCOM Stereo Surround	Selecting this item will enable the RSS 2000's Siren22 stereo recording function. This option is selected (enabled) by default.
Disable Preview	Selecting this item will disable the playback preview function in the Onscreen UI.
Disable H.323 Playback	This item is not checked by default. If selected, it will disable the H.323 connection's playback function and "Play Video" will be disabled in the Onscreen UI main menu. This setting does not affect playback from Web side.

Clicking on the "**View Security Updates Already Installed on this Device**" link on the bottom of the page will look up a table of system updates already installed on the RSS 2000 device, as shown in below figure. Clicking the "**Back**" button on this page will return the user to the previous System Settings page.

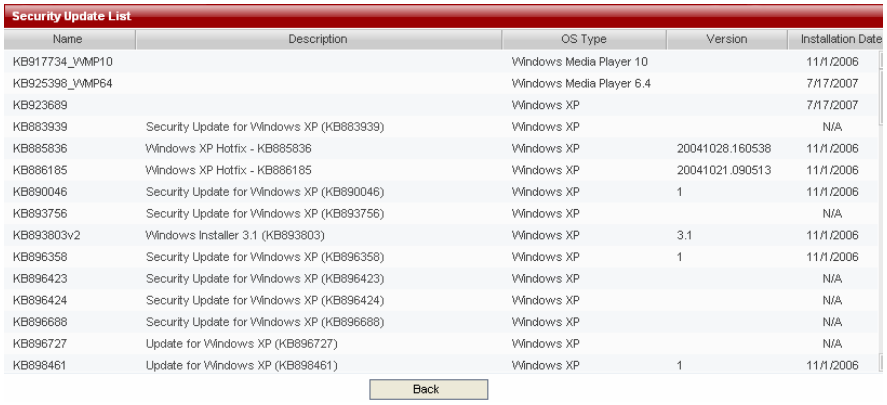


Figure 2-23 Security Updates Table

When synchronizing the device's system time with an NTP server, the user must set an active NTP server address. Since the communication between the device and the NTP server requires a certain time, the system time may not be instantly updated.

Logger Settings

RSS 2000 offers a background log backup function. The log files are used to troubleshoot the system by the Polycom Certified support experts.

Clicking on "**System Configuration -> Logger Settings**" allows the user to configure the RSS 2000 system log information, the log models generated, and the size of the log files. In general it's recommend not to modify the default setting of this section, unless instructed by the Polycom certified support expert.

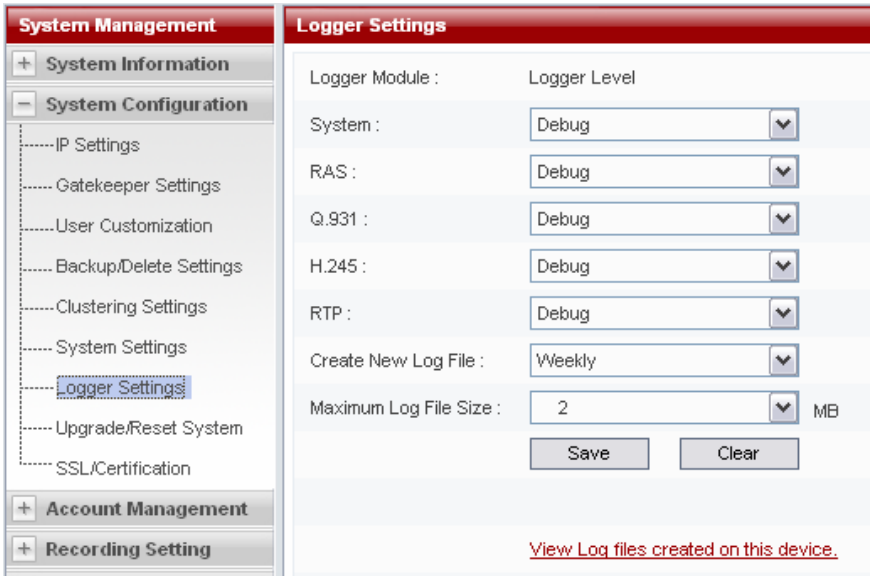


Figure 2-24 Logger Settings Page

Managing Log Files

For log files already created by the device, RSS 2000 offers a function to manage these log files. In the page shown above, click on the "**View Log Files Created on this Device**" link on the bottom of the page, and enter the View Log Files Table page, as shown below:

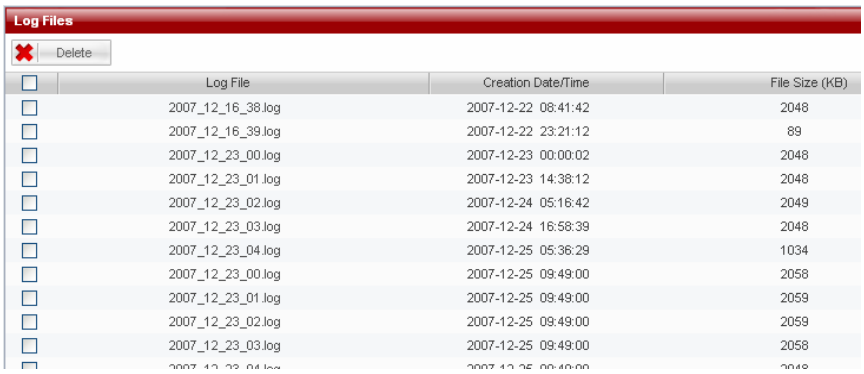


Figure 2-25 Log Files

In this page, the user can view the information and content of log files, and also download and delete the device's system log files.

View Log Files:

Single-click the log file name in the table, and the user can view the contents of the log file. At this time, the system will show the file contents by opening a new window.

Download Log Files:

Right-click the log file name in the table once, and select "**Save Target As**". At this time, a file download message box pops up, and the user can save this log file in his computer's file destination path.

Delete Log Files:

First select the log file for deletion, the user can select a single file or multiple files to be deleted. The user can also delete all files. After selecting the files to be deleted, single click the "**Delete**" button.

- The check box on the left side of the first row in the log table is "Select All". Checking this check box will result in all log files being selected;
- Log files that are in the process of creating cannot be deleted.

Upgrade/Reset System

Clicking on "**System Configuration -> Upgrade/Reset System**" in the navigation bar on the left side of the screen allows the user to upgrade software. Software upgrade for the RSS 2000 device requires having the corresponding upgrade key code for the upgrade package. Different software upgrade packages have different key codes.

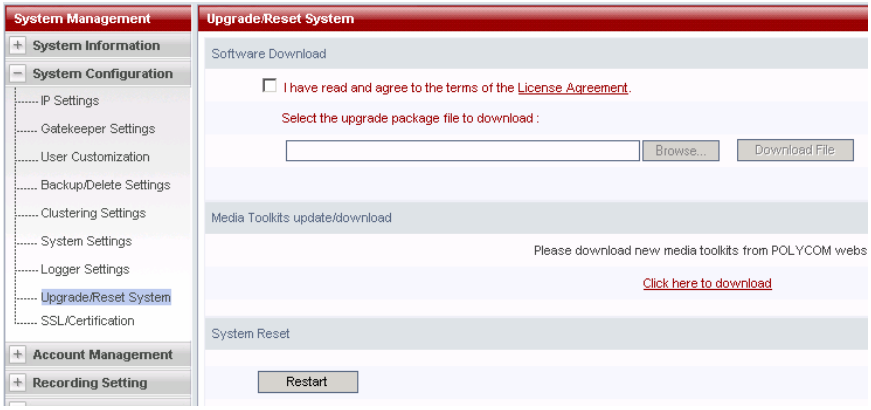


Figure 2-26 Upgrade/Reset System

To upgrade the system software version, click the License Agreement link in the **Software Download** section, if the user agrees with the terms after read them, choose the checkbox indicated agreement and then the browse button will be activated for uploading the upgrade file. Click the button and then choose the local upgrade file, click the **Download File** button to upgrade the system software.

- After clicking the **Download File** button to load the upgrade package, a box will immediately pop up onscreen prompted to reboot the system. However, the uploading process needs a certain time, please be patient to wait for a while until it is completed and then click the Restart button to reboot the system, otherwise a warning box will pop up not allowing reboot.
- After upgrading the RSS 2000 system successfully, please use the corresponding upgrade key code to activate the upgraded system before performing normal recording, for getting a upgrade key code please refer to *Step 2* in *Activation of a newly-purchased RSS 2000* section.
- Different software versions have different upgrade policies. For detailed upgrade operation steps, please refer to the Release Notes for the specific software version being installed.

After the software has been successfully upgraded, the device's software version should be the same as the software version of the upgrade package. If the software version information did not change, it means the software upgrade was not successful. In that case, enter the Product Information page to check that the software currently running on the device meets the minimum version required by the upgrade package. In addition, the user can also check to see if the software upgrade activation code the user entered was correct.

Download Media Tools

To download the media tools package used with the RSS 2000, click on the "**Click Here to Download**" link in the "**Media Tools Download**" area. For a description of the media tools, please refer to *RSS 2000 Media Tools*.

The system must be connected to the internet in order to achieve the above functionality.

Device Reset

To reset the device, click on the **Restart** button on the "**Upgrade/Reset System**" page. A dialog box will pop up asking you to confirm whether you want to reset the device. Select "**OK**", and the device resets and a dialog pops up that asks whether to close the current web page. Select "**Cancel**" and the current web page will not be closed.

When there is an active H.323 connection, the device will not be reset and a warning message will be presented.

SSL Configuration

The RSS 2000's web server supports SSL (Security Socket Layer) protocol. After installing the SSL digital certificate on the device, the user can establish encrypted communications links between the user end and the server, ensuring the security of information transmitted from the web.

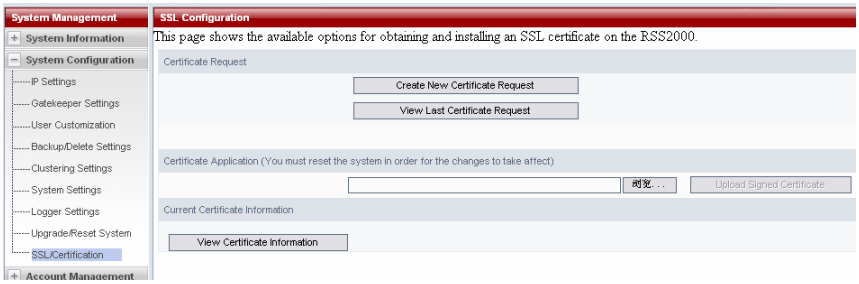


Figure 2-27 SSL Configuration Page

Step 1 - Create New Certificate Request

Click on the page's "**Create New Certificate Request**" button to enter the configuration page. Set up the basic information for the certificate, such as the organization and location. For "**Days Valid**", enter the days for which the certificate is valid. Then set the key size and the password. Click on "**Create**" to complete the certificate request.

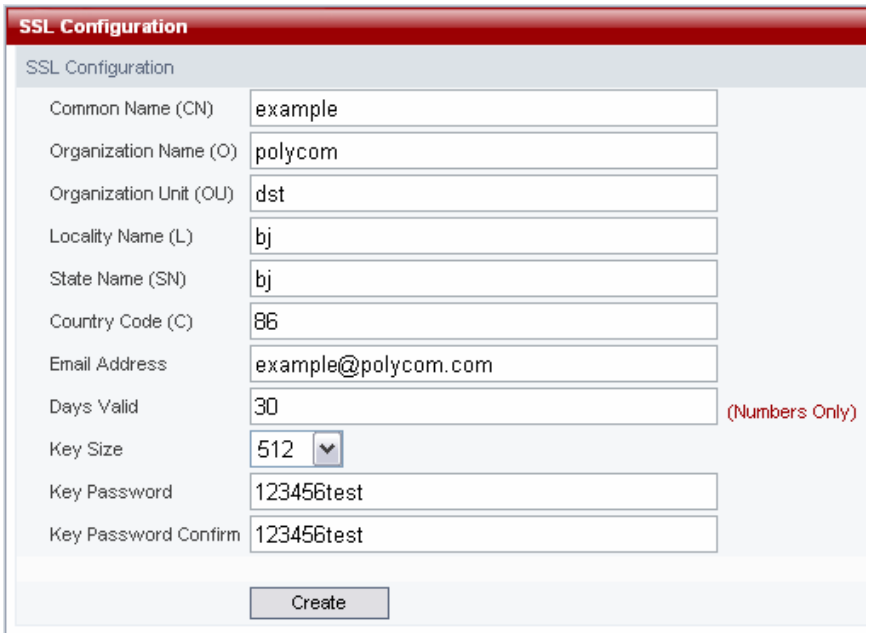


Figure 2-28 Create New Certificate Request

Step 2 – Get Certificate

After creating a certificate request, it automatically enters the "**Certificate Signing Request**" page. This shows the recently created certificate request information, copy the information in the text box into the digital certificate request page the user already purchased in order to generate a certificate.

Figure 2-29 Certificate Request Information

Step 3 – Upload Certificate to Server

After successfully obtaining the certificate, click on the page's "**Browse**" button and select the folder to save the certificate file in, or enter the destination path in the text box on the left. Then click the "**Upload Signed Certificate**" to upload the certificate to the server. After uploading the certificate, the device must be reset before it becomes effective.

Single-click the page's "**View Certificate Information**" button to view the certificate information just installed on the RSS.

Since the SSL secure connection established between the user end and the server uses HTTPS protocol, after installing the certificate on the device, if the user visits the device's web page, the user must enter the format into the

browser as "https://device IP address" in order to successfully connect. And it also requires installing the certificate according to the pop up message box on the local machine to be able to login to the web page. After this, the communication between the user end and the server will always encrypt data based on the SSL secured connection to ensure the security of transmitted data.

- Make sure the uploaded certificate and the currently created certificate request are the same; otherwise the device may not work properly.
- Each time a certificate request is created, it will generate a random key. So even if the information configured in each new certificate request is the same, the certificate generated will be different.
- After installing the SSL certificate, the authentication encryption function needs to be activated on the system settings page for the SSL security authentication mechanism to be activated. For more information about activating the authentication encryption function, please refer to System Settings.

Account Management

Click on "**Account Management**" in the navigation bar on the left side of the web page. This will allow the user to manage the configurations of endpoint properties, user properties, and groups, as well as configuration of the Active Directory.

Endpoint Management

Click on "**Account Management -> Endpoints**", and on the Endpoint Management page, the user can add endpoints, edit endpoint properties, and delete endpoints.

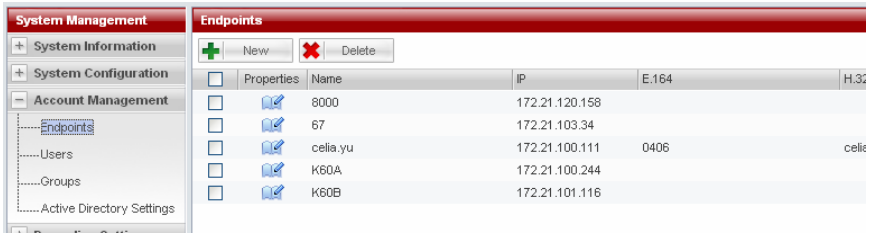


Figure 2-30 Endpoints Page

Add Endpoints

Click on the "**New**" button on the Endpoint Management page, and it will go to the Add Endpoint page, as shown:

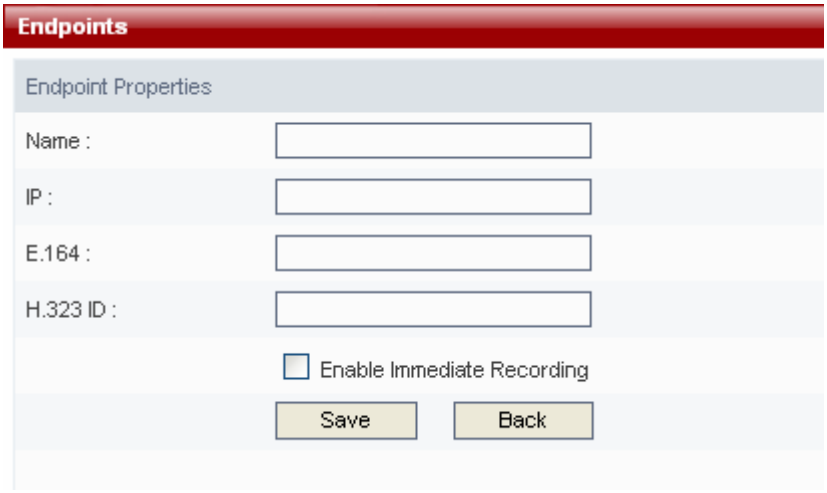


Figure 2-31 *Add Endpoint*

Table 2-8 *Details of Endpoint Configuration Items*

Item	Details
Name	Enter the name to identify the endpoint. The user can enter any combination of letters or numbers, but the length cannot exceed 32 characters.
IP	Enter the endpoint's IP address.
E.164(optional)	Enter the endpoint's E.164 number registered to GK.
H.323 ID (optional)	Enter the endpoint's H.323 ID registered to GK.
Enable Immediate Recording	Recording will start automatically when the RSS 2000 receives a call from this endpoint's configured IP address. Use this setting to allow specific endpoints to bypass all Onscreen menus and begin recording immediately upon connection to the RSS 2000.

- When adding an endpoint name, duplication is not permitted. Name and IP address are required fields.
- When adding an endpoint, the content set for the IP address, the E.164 number, and the H.323 ID will be authenticated in accordance with the settings on the recording rights and the viewing rights.
- The maximum number of endpoints that can be added is 200.

Edit Endpoint Properties

For existing endpoints, the user can click the endpoint properties icon to edit their properties. Endpoint names cannot be edited.

Delete Endpoint

To delete an endpoint on the Endpoints page, after selecting this endpoint's corresponding check box, click the "**Delete**" button. The user can select one endpoint or multiple endpoints for deletion. The user can also select all endpoints for deletion.

The first check box under the "New" button on the endpoint page is "Select All". All of the endpoints will be checked if this check box is selected.

User Management

Click on Account "**Management -> Users**" to add new users, edit user properties, and delete users in the Users page.

Add User

Click on the "**New**" button in the User Management page, and it will link to the Add User page as shown:

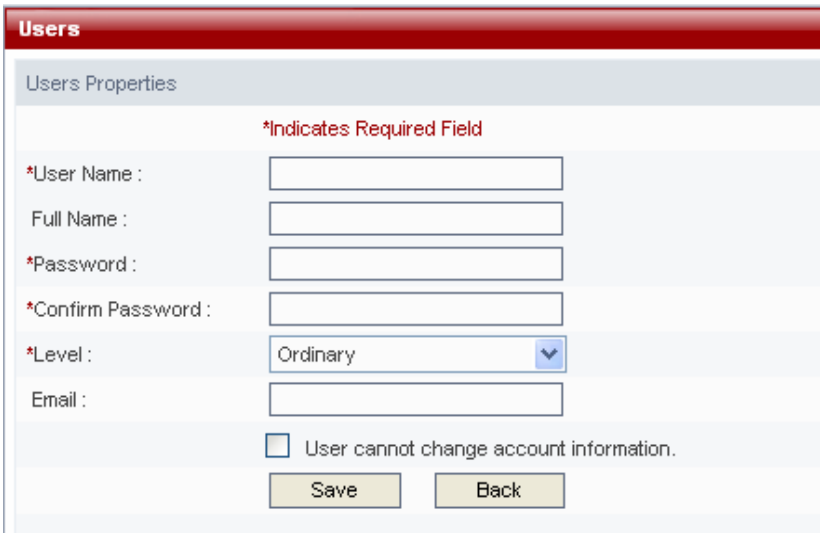


Figure 2-32 Add User

Table 2-9 Details of User Properties Configuration Items

Item	Details
User Name	Set user name for logging into Web UI. Enter any combination of letters or numbers, but the length cannot exceed 32 characters.
Full Name	This item is optional, used to identify the name that goes with the User ID. Enter any combination of letters or numbers, but the length cannot exceed 32 characters.
Password	Set the user's password when logging into the Web UI. Enter any combination of letters or numbers, but the length cannot exceed 32 characters. When user password is not entered, the password is left blank by default.
Confirm Password	Enter the password again. It must be the same as that entered into the password field; otherwise the system will pop up an error message.
User Level	There are two user levels to choose from: ▪ **Ordinary** – A normal user can only view saved videos, live streaming, and their own account information. They can only edit the full name, password, and e-mail. They cannot view or configure other configuration pages; ▪ **Administrator**– Has privileges to view and configure all

Item	Details
	web pages. Note: There is a super administrator (User name: Administrator, Password: polycom) by default on the system, and this user has all privileges and cannot be deleted. However its password can be changed.
E-Mail	Enter a valid e-mail address. The length cannot exceed 64 characters (For future use).
User cannot change account information	This option can only be changed for ordinary user level by Administrator. When enabled **Ordinary** users cannot change their own user password.

- User names must be unique; they cannot be duplicated. Items marked with an asterisk are required fields.
- Multiple users are permitted to login and use the same user name simultaneously.
- The maximum number of administrators that can be added is 200.
- The maximum number of concurrent logins of the Web UI is 50.

Edit User Properties

The user can click this user properties icon to edit user properties for existing users.

Delete User

To delete a user on the Users page, select the user and then click the "**Delete**" button. The user can select one user or multiple users for deletion. The user can also select all users for deletion.

The Administrator cannot be deleted, but the password can be changed.

Group Management

Click on "**Account Management -> Groups**" to enter the Group Configuration page. Groups are used for managing users with similar characteristics together as a group. Defining groups can allow the user to conveniently make global settings for all of the users in a group, such as globally setting recording rights or viewing rights. Using the **Groups** page, the user can add groups, edit group properties, and delete groups.

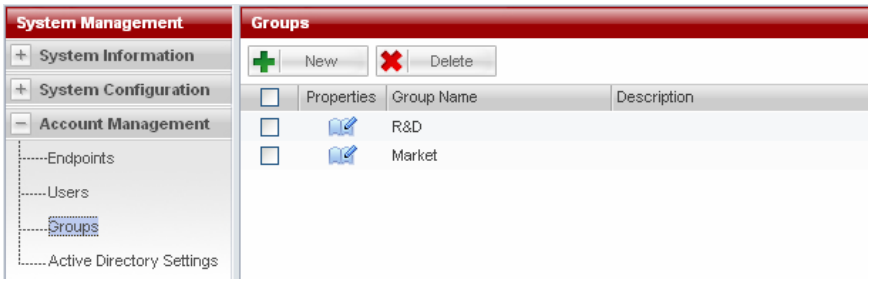


Figure 2-33 Groups Page

Add Group

Click the "**New**" button on the Groups Management page, and the page will jump to the Add User Group page.

On the Add Group page, the user can set the added group name, group description, and the endpoints and users included in the group.

- Name: Group Name. The user can enter any combination of letters or numbers, but the length cannot exceed 32 characters.
- Description: The user can enter any combination of letters or numbers, but the length cannot exceed 128 characters.
- User Members List: The Group Properties configuration includes two lists, for endpoints and users. The user can separately select endpoints and users to add to the group, as shown below:

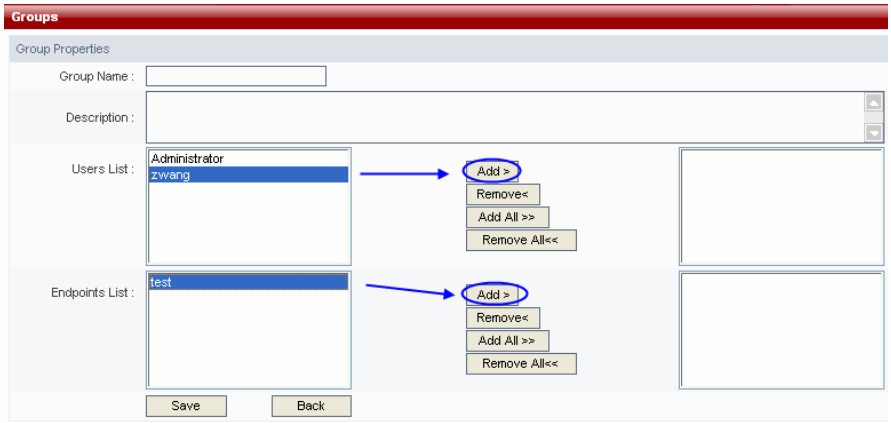


Figure 2-34 Add Group

When adding endpoints and groups, the user can select single endpoints and users to join the group, and the user can also select multiple endpoints and users to join the group. (The user can use the **Ctrl** or **Shift** keys on the keyboard to make multiple selections.) The user also can select all endpoints and all users to join the group.

- Group names must be unique; they cannot be duplicated. This field is required to be filled in. Group description and group members are not required to be set up, so they can be left blank.
- The maximum number of groups that can be added is 200.

After making the settings for groups, click the "**Save**" button to save the setting and add the group. Click "Back" to cancel the settings and return to the Groups page.

Edit Group Properties

The user can click this group properties icon to edit group properties for existing groups.

On the **Edit User Properties** page, you can edit user group description and group members.

Delete Group

To delete a group on the Groups page, select the group and then click the "**Delete**" button. The user can select one group or multiple groups for deletion. The user can also select all groups for deletion by checking the check box in the header.

Active Directory Settings

The RSS 2000 provides the function of integration with an Active Directory server, so that users on the integrated Active Directory do not need to register on the RSS 2000 to directly visit the RSS 2000 web management page to play a video.

Click "**Account Management -> Active Directory Setting**s" in the navigation bar on the left side of the screen to enter the Active Directory Server configuration interface.

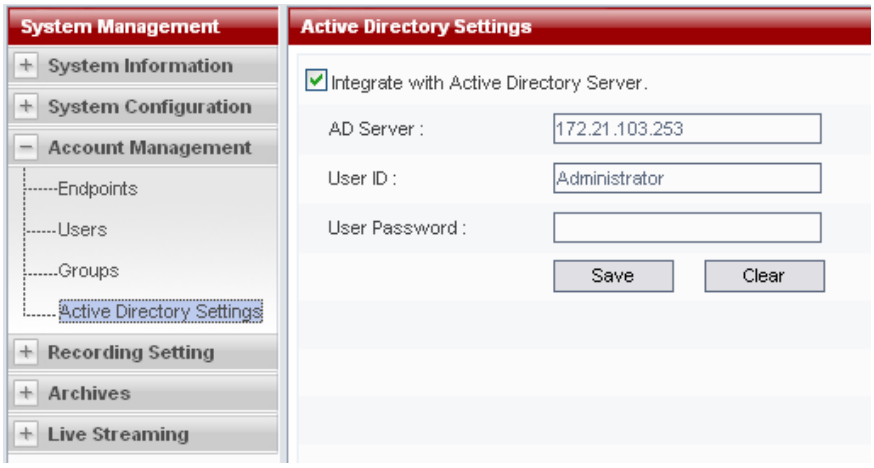


Figure 2-35 Active Directory Settings Page

Table 2-10 Details of Active Directory Settings

Item	Details
Integrate with Active Directory Server	Sets whether the RSS 2000 integrates with an Active Directory server. When checked, RSS 2000 integrates with an Active Directory server. Then, you can set the specific Active Directory server and the users and passwords that can access domains within the Active Directory. When unchecked, the RSS 2000 is not integrated with an Active Directory server, and the settings related to the Active Directory server are disabled.
Active Directory Server	Sets the IP address or domain name of the Active Directory server to be integrated.
User ID	Sets the user name used by the RSS 2000 when accessing the Active Directory server.
User Password:	Sets the user password used by the RSS 2000 when accessing the Active Directory server.

When setting the domain name of the Active Directory server, make sure that the user

has set a DNS server address that can resolve this domain name in “System Configuration -> IP Settings”.

After successfully setting up the abovementioned configurations, the RSS 2000 web login page’s “Login Domain” pull-down list will be enabled and list the domain names of all set up Active Directory Servers

Now, the user can select an appropriate domain name from the pull-down list, and use a user name on this domain to directly log in. When the users using this domain directly login to RSS 2000 web management, the users will only have the privileges of a normal user.

Recording Settings

The RSS 2000 supports use of the call connection mode to record H.323 endpoint (or MCU) conferences. This is to say that an endpoint (or MCU) can connect with the RSS 2000, which then decodes and stores the endpoint (or MCU) bit stream. Data is stored in two formats: raw bit stream and WMV format. Raw bit stream is used for H.323 Playback, while the WMV files are used for the Web live streaming and Web archives view.

The RSS 2000 provides two types of recording modes: Single point recording and point-to-point recording.

Single point recording involves use of an endpoint or MCU to directly call the RSS 2000 and establish a connection. During single point recording, the RSS 2000 stores the stream of audio and video data from the endpoint or MCU. The RSS 2000 supports recording in the following video formats: H.261/H.263/H.264, and the following audio formats:G.711A/G.711U/G.722/G.728/G.722_1C/Siren14/Siren 22 Stereo. There is an option the user or administrator can “check” to record the H.239 content at the beginning of each recording. When selected, the Content will be recorded so that it shows up in a second window and the video/audio and content streams can be separated at a later time.

The RSS 2000 can support two simultaneous streams. Practically, that would be two audio/video only recordings or a single audio/video with content recording.

Point-to-point recording occurs when two endpoints call into a pre-established RSS 2000 recording room. The RSS 2000 will store the bit streams from the two endpoints as a file. The endpoints can each view the images from the two participating endpoints. When only one endpoint enters a recording room and begins recording, the endpoint will only view its own loopback image. Point-to-point recording also supports H.239 dual-stream recording. The RSS 2000 can support at most one point-to-point recording, with or without H.239 content, and only when there are no single point recordings occurring.

- The RSS 2000 supports H.239 only. To record the proprietary People + Content standard, utilize a Polycom MGC to transcode the proprietary content to H.239.
- The RSS 2000 can support a maximum of 2 single point recording tasks, or one point-to-point recording.

Click on "**Recording Settings"** in the navigation bar on the left side of the page, and make settings on these pages for the RSS 2000's single point recording properties, point-to-point recording properties, web dial-out recording, and multicast videos.

Single Point Recording Settings

Click on "**Recording Setting -> Single Point Settings"** to enter the **Single Point Settings** page. Here the administrator can configure the settings for the single point recording parameters. When an endpoint dials the RSS 2000 to start single point recording, that session will function according to these parameters. In the single point recording settings the administrator can separately set whether or not to record H.239 dual video, request I-frames at specified intervals during recording, whether or not to allow live streaming of the video during recording, and recording rights and viewing rights.

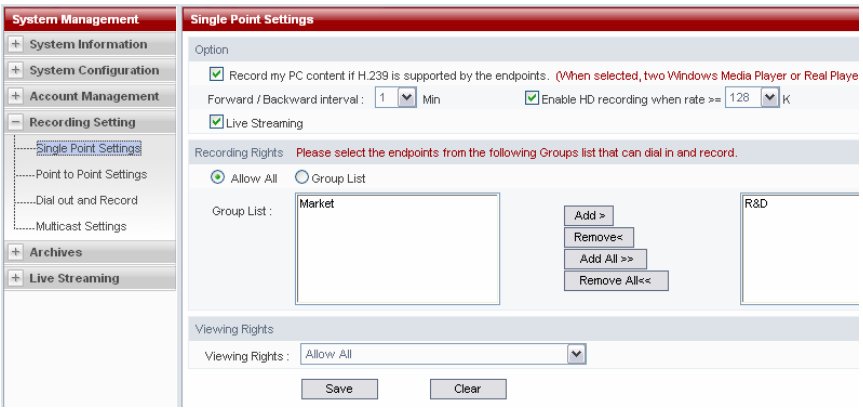


Figure 2-36 Recording Settings Page

Recording H.239 Dual Video

Check the **Record my PC content if H.239 is supported by the endpoints** box and then when doing single point recording, the user will send H.239 dual video PC screen to the endpoints. The recording rate of the H.239 content is 1 frame/second. When playing back recorded videos in Windows Media Player or RealPlayer, it will open two video windows showing the video image and the PC screen, as shown below. The recorded dual video PC screen can support XGA resolution.

Figure 2-37 *Recording H.239 Dual Video*

Whether the RSS 2000 will record H.239 dual video depends on whether the endpoint supports H.239.

Setting a Request for Fast Forward / Backward Interval in the Recording Process

In order to ensure quality during playback, the RSS 2000 will request I-frames from the endpoint at the configured time interval. The default time interval is a request of one Fast Forward/Backward interval of one minute, and it can be set to anywhere between 1 and 10 minutes. During H.239 video recording, the interval will be simultaneously relevant for the main image and the dual video image at the set time interval.

High Definition (HD) Recording

If this box is checked, the user can enable HD recording in the single point recording process. After checking this box and setting the call speed parameter, during single point recording, when the call speed is greater than the set value and the endpoints support HD video, the RSS 2000 enables HD recording.

Live streaming is not supported for HD recording.

When SD/HD call is being recorded, The web archive view will become available for viewing in a ratio of 1:6 (For every one minute recording it will take around 6 minute for it's availability). Progress bar is displayed when clicking on the play button of the

archive. H323 playback is available immediately.

Live Streaming

If this box is checked, the user can enable live streaming in the single point recording process.

After checking this box, during single point recording, click "**Live Streaming"** in the navigation bar to enter the Live Streaming Page where the user can see that the video is streaming. When recording HD or SD video, live streaming is not available because the file must be converted to WMV format after the recording completes.

Recording Rights Settings

This is used to set which endpoints can do single point recording after establishing a connection to the RSS 2000 when there are recording resources available. There are two levels of recording rights settings: allowing all endpoints to do recording, and only allowing endpoints listed in groups to do recording. The default setting is allowing all endpoints to do recording.

- **Allow All**: When this is selected, all endpoints that have established a connection to RSS 2000 can begin recording when there are recording resources available.
- **Group List**: When this is selected, only endpoints that are in selected groups can start to record. To set up groups with recording rights, the group must be selected from the list, and then the "Add" or "Add All" button must be clicked to add these to the rights list on the right side.

  When selecting groups to join the list, the user can use the **"Ctrl"** and "**Shift"** keys on the keyboard to select multiple groups at the same time. The user can also use this method to delete groups from the list.

When endpoints without recording rights start to record, the endpoint's menu will show **You have no record privilege**, as shown below:

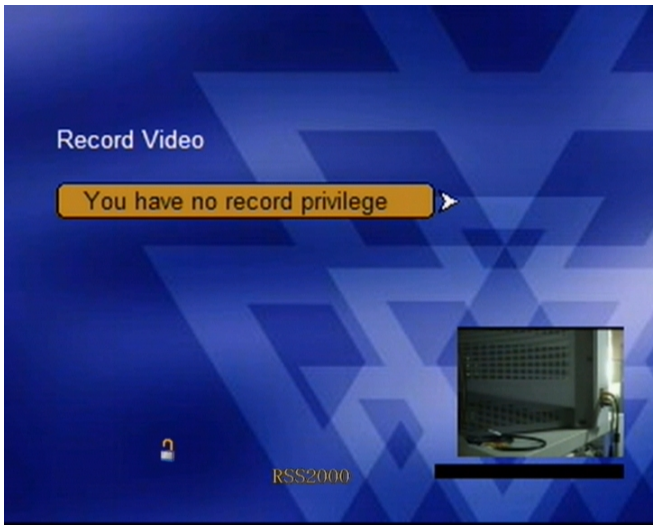


Figure 2-38 You have no record privilege Message

Viewing Rights Settings

This is used to set whether or not endpoints are allowed to view recorded videos during playback. There are three levels of viewing rights settings:

- **Allow All:** Indicates that videos generated by single point recording can be played back by any endpoint or user.
- **Deny All:** Indicates that videos generated by single point recording cannot be played back by any endpoint or non-administrator user.
- **Groups members of the recording endpoint /MCU:** Indicates that only endpoints listed as members of groups defined in recording rights can view the video, and other endpoints or users cannot view the video through the web interface, and they also cannot play it back.

After setting the previous settings, click the **"Save"** button to save all the settings that were made. Before clicking the Save button, clicking "**Clear**" will cancel all settings that were previously made on this page.

Point-to-point Recording Settings

Click on "**Recording Setting -> Point to Point Settings"** to enter the Point-to-point recording page. Here the administrator can configure settings for point-to-point recording. These settings will be used when endpoints dial and connect to the RSS 2000 and enter the recording room to start point-to-point recording. This will be done according to preset parameters. In the **Point to Point Settings** page, the administrator can set recording room name, recording room number, recording room protocol, and recording room rate, as well as whether nor not to record H.239 dual video, request I-frame intervals during the recording process, whether or not to stream the video, and recording rights and viewing rights.

On the "**Point to Point Settings**" page, the administrator can view all current recording room names, recording room numbers, H.239 dual video configurations, recording room rate, and current number of endpoints in the recording room, as well as recording room status, as shown below:

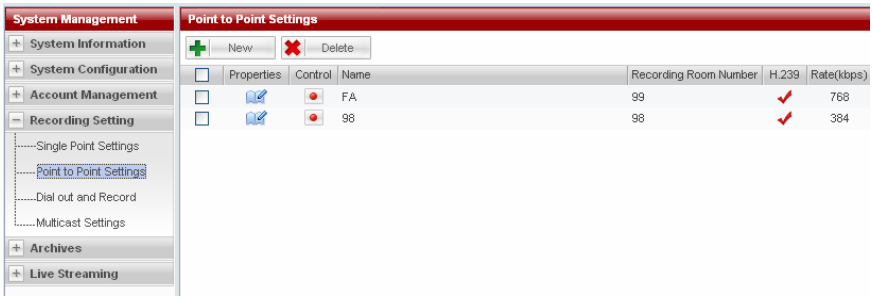


Figure 2-39 Point-to-point recording Settings Page

Recording room name, recording room number, and recording room rate are parameters used to identify the recording room. Whether or not to enable H.239 dual video identifies whether or not to pop up two windows during web playback. *Participants* shows the current number of people in the recording room, 0/2 indicates that no participants have joined the recording room. 1/2 indicates that one participant has joined the recording room. 2/2 indicates that two participants have joined the recording room. There are two kinds of recording room states: idle and recording. "**Idle"** means that recording has not started, and "**Recording"** means that recording has started.

Create Recording Room

Click the "**New**" button on this page, and the page will jump to the Add Recording Room page, as shown below:

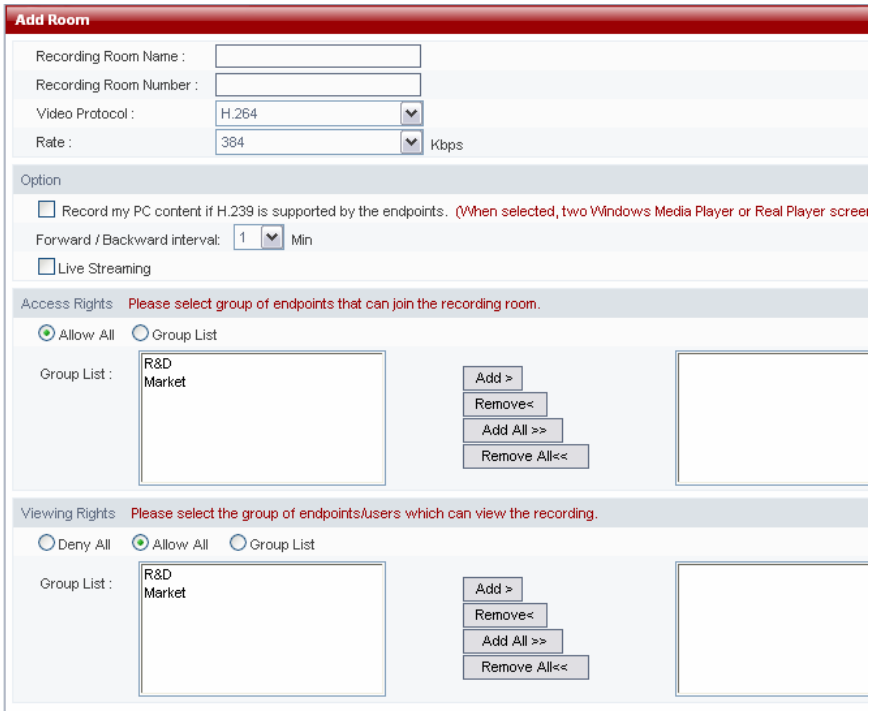


Figure 2-40 *Point-to-point Recording Room Settings*

On this page, the administrator can configure the settings for recording room name, recording room number, video protocol, and recording room rate.

- **Recording Room Name:** This is used to identify the recording room. Any combination of letters or numbers that does not exceed 32 characters can be entered.
- **Recording Room Number:** This is used to identify the recording room's E.164 number. Only numbers can be entered, with a maximum of 16 characters. When the endpoint and RSS 2000 are both registered with GK, the endpoint can directly dial the recording room by dialing "RSS E.164 Number + Recording Room E.164 Number".
- **Video Protocol:** This defines the recording room's video protocol, which is the protocol used when the RSS 2000 exchanges video images with the endpoints.
- **Rate:** Used to define the rate the endpoints connect to the recording room. The range is between 128kbps and 1024kbps.

- The maximum number of recording rooms that can be added on one RSS 2000 is 4.
- SD/HD recording for Point to Point calls is not supported.

Access Rights

In the "Access Rights" area, the administrator can limit the endpoints that are allowed to enter the recording room. There are two levels of access rights:

- **Allow All:** When this is selected, all endpoints that have established a connection to RSS 2000 can join the recording room while the recording room is not full.
- **Group List:** When this is selected, only endpoints that are part of selected groups can enter the recording room. To set up groups to be allowed to enter the recording room, the group must be selected from the list, and then the "Add" or "Add All" button must be clicked to add these to the allowed list on the right side.

  When selecting groups to join the list, the user can use the **"Ctrl"** and "**Shift"** keys on the keyboard to select multiple groups at the same time. The user can also use this method to delete groups from the list.

The settings for "Recording Options" and "Viewing Rights" are the same as those on the Single Point Recording page. This information will not be repeated here. For more details, please refer to *Single Point Recording Settings*.

Edit Recording Room Properties

The user can click this recording room properties icon to edit recording room properties for existing recording rooms.

On the Edit Recording Room Properties page, the user can edit recording room parameters, options, recording rights, and viewing rights.

During the recording room recording process, recording room properties cannot be edited.

Delete Recording Room

To delete a recording room on the page, select the recording room and then click the "**Delete"** button. The user can select one recording room or multiple recording rooms for deletion. The user can also select all recording rooms for deletion.

The first check box under the "New" button on the Point-to-point Recording Settings page is "Select All". All of the recording rooms will be checked if this check box is selected.

Point-to-point Recording Control

After establishing a connection between the endpoint and the RSS 2000, entering the Point-to-point Recording page and clicking on the red button for the recording room in the **"Control"** table begins point-to-point recording.

After clicking the red button, if there are usable resources, then the recording room's point-to-point recording. At this time, the control buttons change to .

To pause recording, click on the pause button on the left, and the buttons change to .

Continue recording by clicking the left button again. To stop recording at any time during the recording process, click the button on the right.

Dial Out and Record Through the Web

Click on "**Recording Setting -> Dial Out and Record"** to configure and initiate a dial out and record session from the web UI.

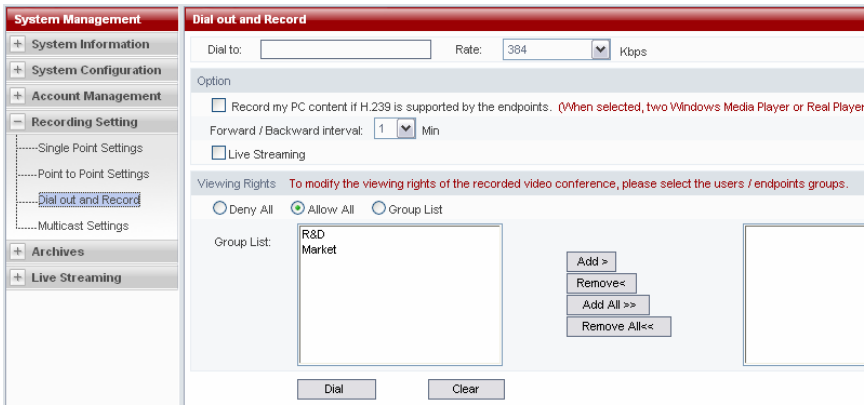


Figure 2-41 *Dial Out and Record Page*

In the location field, enter the IP address of the endpoint to be dialed. (If registered to a gatekeeper, enter the endpoint's E.164 number or H.323 ID.) After selecting the dialing bandwidth, click on "**Dial"** button on the bottom of the page to dial. The dial rate is 128kbps-1920kbps. After dialing, the RSS 2000 will do a capability negotiation with the called endpoint and establish a connection according to the negotiated audio and video protocols.

- After dialing and establishing a connection through the web, if there are recording resources available, recording starts immediately; there is no need to change additional settings on the endpoint other than answering the call.
- After dialing and establishing a connection through the web, if there are no recording resources available on the RSS 2000, then the connection will terminate after 40 seconds.
- The settings for **"Recording Options"** and "**Viewing Rights"** are the same as those on the Single Point Recording page. This information will not be repeated here. For more details, please refer to *Single Point Recording Settings*

Multicast Settings

Configuring the RSS 2000 Multicast function will enable a group of PC within the same subnet as RSS 2000 or accessible via router simultaneously view the video stored on RSS 2000 or being streamed.

Click on "**Recording Setting -> Multicast Settings"** in the navigation bar on the left side of the page, and the user can set information related to video multicasting. If the multicast function of the device is not enabled, all of the options on this page will be disabled.

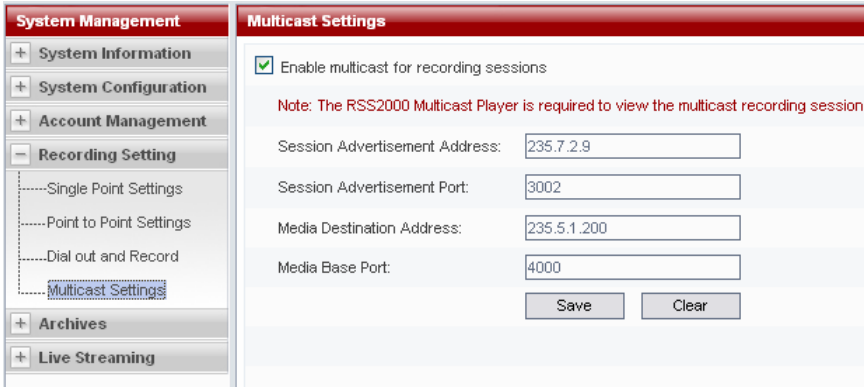


Figure 2-42 Multicast Settings Page

Table 2-11 Multicast Settings Details

Item	Details
Enable multicast for recording sessions	When checked, the device multicasts the currently recording video. At this time, you can use the RSS 2000 Multicast Player to receive to view the multicast video. When it is unchecked, the device does not multicast the currently recording video.
Session Advertisement Address	Through this address, users can view the list of all videos currently being multicast.
Session Advertisement Port	Sets the port used by the video list sent by the RSS 2000 device, with a range between 3000 and 3999.
Media Destination Address	Sets the multicast address used by the video's audio and video sent by the RSS 2000 device.
Media Base Port	Sets the port used by the video sent by the RSS 2000 device, with a range between 4000 and 65000.

Archives Multicast

To multicast one archive existing:

1 Click Archives-> Archives in the navigation bar on the left of page, and then select an existing archive in the list in **Archives** page.

2 Right click the corresponding **Play** button, and then choose **"Start Multicast of this Video"**.

3 After refreshing the web page, the user will see the name of this video turned red, indicating that this video is being multicast. Now, this multicast video can be received using the reception tool RSS 2000 Multicast Player, as shown in Figure 2-43. For details about using the reception tool, please refer to *Using RSS 2000 Multicast Player*.

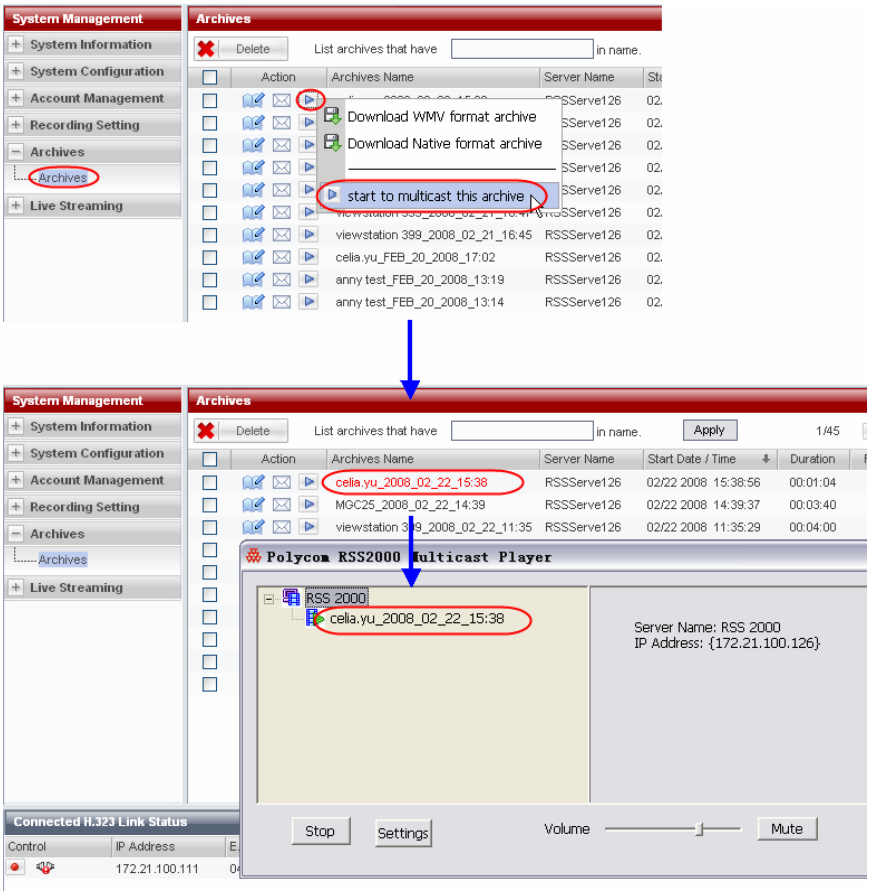


Figure 2-43 Archives Multicast

To stop multicasting video, right click the **Play** button again and select "**Stop Multicast of this Video**".

Also users can configure how many times they want to repeat this archive by specifying *Number of Repeats* option in the **Edit Archive** page (click the properties icon of the archive), as shown below.

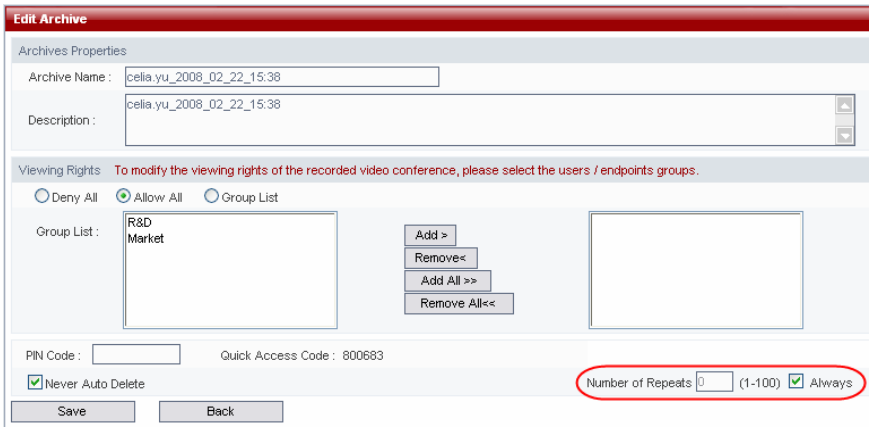


Figure 2-44 Number of Repeats Option

Live Streaming Multicast

The video being streamed is also being multicast automatically if the multicast function is enabled. In other words, when a video is being

streamed, the user can launch the RSS 2000 Multicast Player software to receive the video, as shown below.

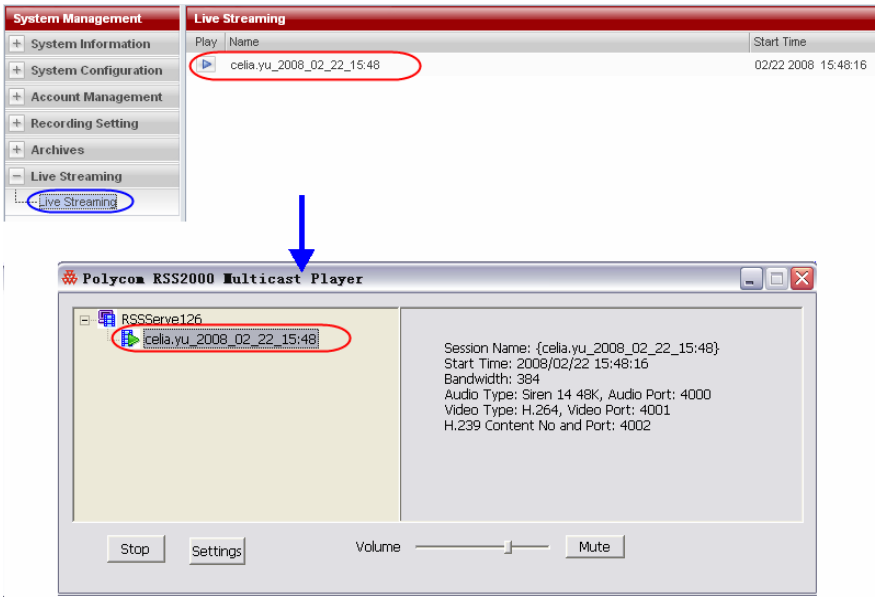


Figure 2-45 Live streaming multicast

- Two archives can be simultaneous multicast.
- Multicast is a software option that can be purchase in addition
- When a LAN has multiple RSS 2000 devices simultaneously multicasting, make sure to use different multicast addresses and ports.
- RSS 2000 Multicast Player is multicast software specifically designed to receive multicasts sent by the RSS 2000 device. For more details, please refer to *Using RSS 2000 Multicast Player*.

Managing Recording Files

Click on "**Archive Videos"** in the navigation bar on the left side of the web page, and for archives generated by recording a user can do status lookup, play videos, change archive properties, delete archives, lookup archives, and order of archives.

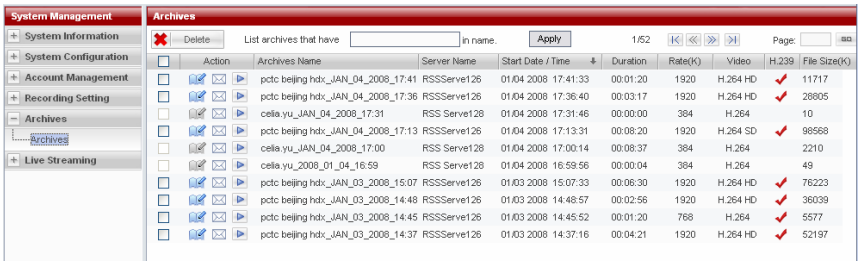


Figure 2-46 Archives Page

Viewing Archive Properties

As shown in Figure 2-46, the Archives page shows the videos that can currently be seen by users and their video properties, including: video name,

server name, video start time, duration, video recording rate, video protocol used, whether or not H.239 was used, and the file size.

Table 2-12 Archive Properties Details

Item	Details
Video Name	The default name for videos generated by recording follows the naming rule of “endpoint H.323 name (recording room name) + recording time”. Video names can be edited after being generated by recording.
Server	Shows the H.323 name of the RSS 2000 device the archive is saved on.
Start Date/Time	The start time is the RSS 2000 device’s time when recording starts.
Duration	Shows the duration of the archive.
Rate	The rate of the connection between the endpoint recording the video and the RSS 2000, expressed in Kbps.
Video	The video protocol used by the connection during recording of the video.
H.239	Whether or not H.239 was enabled during recording of the video.
File Size	The size of this archive, expressed in KB.

Looking Up Archives

In the archive table, the user can look up archives by their archive names, as shown below:

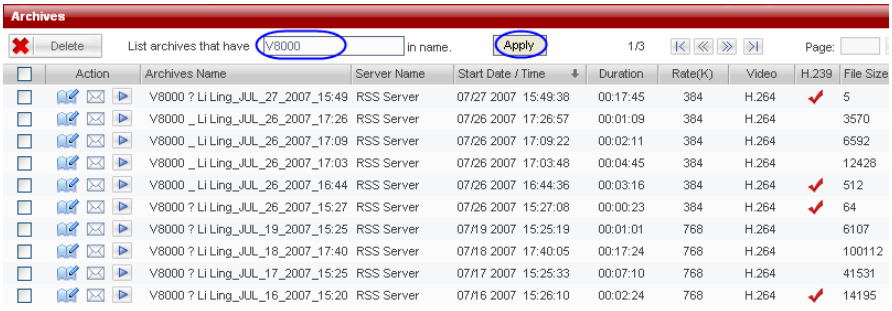


Figure 2-47 Enquiring Archives

Enter the keyword for the archive’s name in the inquiry input box, and then click the apply button to inquire. After successfully looking it up, the video table shows all archives that contain the keyword entered.

The keyword entered in the inquiry input box is case sensitive.

Sorting Archives

Besides looking up archives by their archive names, the RSS 2000 also provides the function of sorting by archive properties. The video properties that the files can be ordered by include: video name, server, start date/time, duration, rate, video, H.239, and size.

Single-clicking on a property in the archive table's header can order the archives by that property in increasing order or in decreasing order. When the table is in ascending or descending order by any property, clicking the header again will sort the list in the opposite order.

Changing Archive Properties

The user can click this video properties icon on the Video Table page to enter the **Edit Archive** page to edit, as shown below:

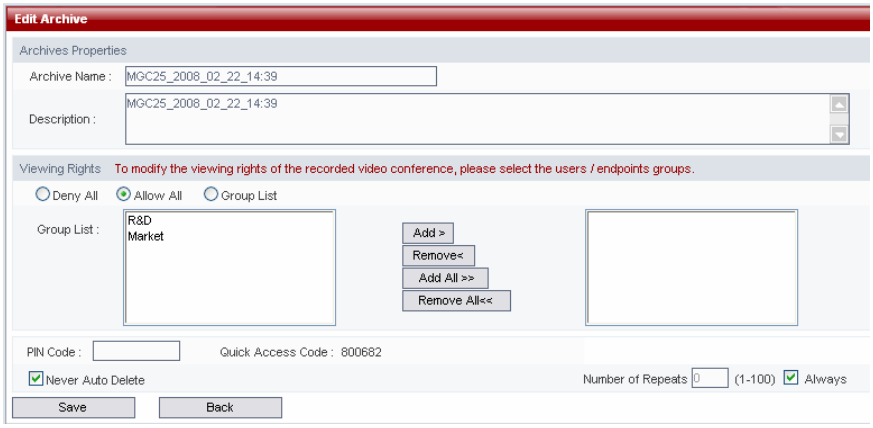


Figure 2-48 *Edit File Properties*

Table 2-13 *Archive Properties Settings Details*

Item	Details
Video Name	The user can enter any combination of letters or numbers, but the length cannot exceed 48 characters.
Description	The user can enter any combination of letters or numbers, but the length cannot exceed 128 characters.
Viewing Rights	This is used for setting the viewing rights for this video during playback. The specific operations are the same as the settings on the Single Point Recording page. For details, please refer to *Viewing Rights Settings*.
PIN Code	After setting a PIN for the archive, the endpoint must enter the code that is entered into this field to play the video. Enter no more than 8 numbers.
Quick Access Code	Automatically generated by the system. When using endpoint control menu to replay videos, they can enter this access code to directly replay the recorded file.
Never Auto Delete	This sets whether or not the device is allowed to automatically delete the archive after the archive is backed up on the device. When checked, even if the "Backup/Clear Settings" are set to automatically delete videos, the video will not be deleted. When unchecked, it allows the device to automatically delete the video. This setting has no effect on manual deletion of videos.
Number of Repeats	This sets the number of times the file will be multicast.

Playing Archives

In the archive table, clicking on the Play icon for the video to be viewed can automatically call the PC's Windows Media Player software to play the video.

- During video play, the viewer can drag the slider for fast-forward or rewind of the video.
- When playing a video, if the user selects another video to view, the first video will immediately stop playing.
- HD/SD videos cannot be played until they are completely converted. At this time, moving the cursor over the corresponding video's Play button will cause a message giving the progress of the conversion to appear. To see an updated progress message, refresh the web page.

Downloading Archives

A right click on the **Play** button for the target file allows the user to download the archive. The user can select "**Download Archive"** or "**Download Source Code File"**. The archive is in WMV format and can be directly played by the Windows Media Player. The source code file can only be played after using Polycom's RSS 2000 Archive Converter to convert the video format. For an introduction of the converter tool, please refer to *Using RSS 2000 Archive Converter*.

After selecting the format and destination path for the downloaded archive, the archive will be downloaded to the local PC.

Users can only download archives that are in the device's archive list.

E-Mail Link

Clicking on the "**E-Mail This Link"** icon corresponding to the archive can automatically open an e-mail message in user's default mail client (Outlook, Outlook Express, Lotus Note etc.) to send a link to the archive as part of the body of an e-mail.

The user just needs to fill in the recipient's e-mail address. The e-mail's default subject will be "You are invited to view this archive". After the recipient receives the e-mail, they can find the playback address for the archive in the e-mail. They can enter the playback address in their browser's address field and press the **Enter** key to view the video. In addition, a user also can open their Windows Media Player software and enter the playback address in the dialog box under "**File → Open URL"** to view the video. Make sure that the network the recipient is on can communicate normally with RSS 2000 to make playback successful.

The default video playback address in the e-mail includes the link to the RSS 2000 LAN 1 port IP address. If the network the RSS 2000 is on is behind a firewall, external users usually cannot access the RSS 2000's private address to play the video. When this happens, set a public network IP or DNS name in the **"External IP/DNS name"** page in "**System Configuration → IP Configuration"**. After this, video playback e-mails sent will provide a video

playback address that includes the public network IP address or DNS name. For more details about external IP settings, please refer to *IP Address Settings*.

Permission of an archive are not stored on the archive when sending it as email link. This is the reason that the email link option is available only for the administrator who can make the decision if to use this functionality..

Deleting Archives

To delete a file on the video table, after selecting this archive's corresponding check box, click the "**Delete"** button. The user can select one video or multiple videos for deletion. The user can also select all videos for deletion by checking the check box in the header.

The first check box under the "New" button on the Archives page is Select All. All of the archives will be checked if this check box is selected.

Go to Archive Pages

The current page number and total number of pages are shown in the top right corner of the archives table.

The buttons to the right of the page numbers are used for page turning. The button on the far left and the one on the far right are used to return to the first page or jump to the last page, respectively. The two middle buttons go to the previous page and the next page, respectively. To jump to any page, enter a page number into the blank field on the right and then click the button.

H.323 Connection Status Display

The recording status of the endpoint currently connected to the RSS 2000 can be displayed in real time on the bottom of the web page, as shown below. Recording control and status display can be done for the connections that show the H.323 connection status as connected.

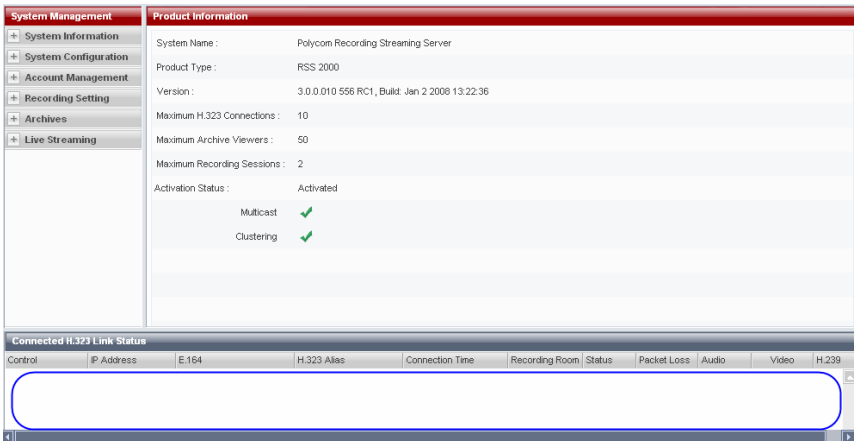


Figure 2-49 H.323 Connection Status Display Area

With the control buttons, the user can initiate recording on the selected H.323 connection. After the connection is established, the control button display shows as in the following:

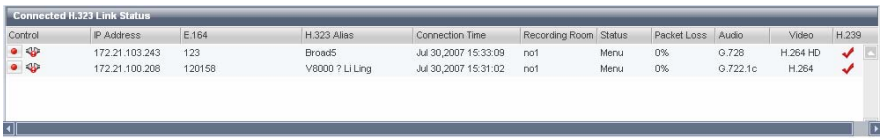


Figure 2-50 *Established Connections*

Click the button on the right to start single point recording. Now, the buttons will change to .

Repeatedly clicking on the button on the left will pause/continue the recording operation, and the buttons will change to .

Clicking on the button on the right will stop recording. Clicking again on this button will disconnect the H.323 connection.

Each H.323 connection status display includes: the IP address of the H.323 endpoint that establishes a connection with RSS 2000, the H.323 ID, the time the connection was established, the recording room joined, recording status, packet loss rate, the audio and video protocols, and whether it is H.239 enabled. Recording status has three kinds of displays. When it shows as "**Idle"**, it means it has not started recording or playing video. When it shows "**Playback"**, it means it is in the process of playing video. When it shows "**Recording"**, it means it is in the process of recording. Packet loss rate shows the statistics for the packet loss between the endpoint and the uplink with the RSS 2000, tabulated once every 5 seconds.

- The H.239 column displays whether or not H.239 is enabled on the endpoint, but does not show if the RSS 2000 is recording or playing back H.239. It only identifies if this endpoint has H.239 capability.
- H.323 connection status display is refreshed every 30 seconds.

3

Onscreen User Interface (UI) – Conference Recording

In addition to using the Web UI to manage the RSS 2000, users can also use the onscreen UI which allows the user to perform recording and playback tasks to interact with the device. This chapter will explain in detail how to use the onscreen UI to perform single point and point-to-point recording. For information about playback please see *Chapter 4 Onscreen User Interface (UI) – Archive Playback*.

The Onscreen UI employs a remote control to control the RSS 2000. An ordinary endpoint remote control unit can be used to manage the RSS 2000 using FECC (Far End Camera Control). DTMF tones can be used to operate Onscreen menus. Polycom's HDX endpoint remote control has six buttons used to control conference recording and video playback. These six buttons consist of: Play/Enter, Record, Stop, Pause, Forward, and Reverse.

The FECC and DTMF control buttons are defined in below table.

***Table 3-1** Definitions of FECC and DTMF control buttons*

FECC	DTMF	Description
←	4	▪ Return to upper level menu ▪ Exit menu, display image (when there is no upper level menu) ▪ Select menu (when in the image display state)
→	6	▪ Enter lower level menu ▪ Confirm selection ▪ Select menu (when in the image display state)
↑	2	▪ Select upward when in the menu display state (can cycle) ▪ Select menu (when in the image display state)
↓	8	▪ Select downward when in the menu display state (can cycle) ▪ Select menu (when in the image display state)

Single Point Recording Using an Endpoint Menu (onscreen UI)

Main Menu

After using an endpoint to call the RSS 2000 and establish an H.323 connection, the RSS 2000 will present the main menu below.

Figure 3-1 Main Menu

On the interface shown above, use the remote control to highlight and select **Record Video.** The user will see the *Record Video* menu, as shown below.

Figure 3-2 Start Recording

H.239 Dual-stream Recording

Select "Yes" or "No" after selecting **Record my PC content** to confirm whether or not the PC content will be recorded along with the audio/video, note that the default value of this selection is based on the single point recording setting in the recording setting of the web administrator view. When ”Record my PC Content” is selected, the RSS 2000 will record the PC content sent by the endpoint and also store the audio/video bit stream in a file. When played back from a computer, Windows Media Player is used and will open two windows: an external (small) window is used to display people video images,

and the primary (large) window displays the recorded PC.

If PC Content recording is selected, but no PC content iwas sent during the recording, the Windows Media Player file will still open two windows during playback but the primary window for PC content will remain black. Therefore, users should only check “Record my PC Content” when they are sharing H.239 content. Otherwise, the user should select “No” for this option.

PIN Code Setting

In the Record Video menu, the user can select **Set PIN code for this recording**. The system will enter the PIN code setting menu.

Figure 3-3 PIN Code Setting

An IVR message will alert the user to input the PIN code followed by "#" to exit. To set the PIN code, use the remote control to enter a number no more than eight digits in length. Pressing "#" to exit is not necessary if a user enters an eight-digit PIN code. The digits of the PIN code will be visible on the menu page during the setting process. After the user press "#" to complete the setting, the menu will automatically jump to the "Record Video" menu, and a marker for the PIN code will appear after "Start Recording," as shown in the figure below. If viewing a recording where a PIN has been set, viewers will be asked to enter the correct PIN code before they can play back the video.

Figure 3-4 Setting PIN code and returning to the Record Video menu

Start Recording

Once the decision has been made to include H.239 content and/or a PIN code, select **Start Recording** to begin the recording. Once selected, the recording begins immediately. The user will hear an IVR message "Conference recording has started", and see a volume indicator at the bottom of the screen. The user will see their own image on the endpoint screen as in Figure 3-5 after pressing the"⟵" key.

Since the recording begins immediately, the user may talk over the IVR message. The IVR message will not be included in the recorded file.

Pause/Resume

The user can pause a recording at any time using the endpoint's remote control. When viewing loopback video, pressing any of the direction keys will return to the Record Video menu. Selecting **Pause** will pause the current recording, and the "Pause" option will change to "Resume". The user will also hear an IVR message "The conference recording is now paused." The bit stream sent by the endpoint to the RSS 2000 will not be stored while recording is paused.

After pausing a recording, use the remote control to select **Resume** to resume the recording. The user will hear the IVR message "The conference recording is now resumed", and the "Resume" menu option will change back to "Pause". In the video file generated from this recording, the bit stream sent to the RSS after pausing and before resuming will not be recorded.

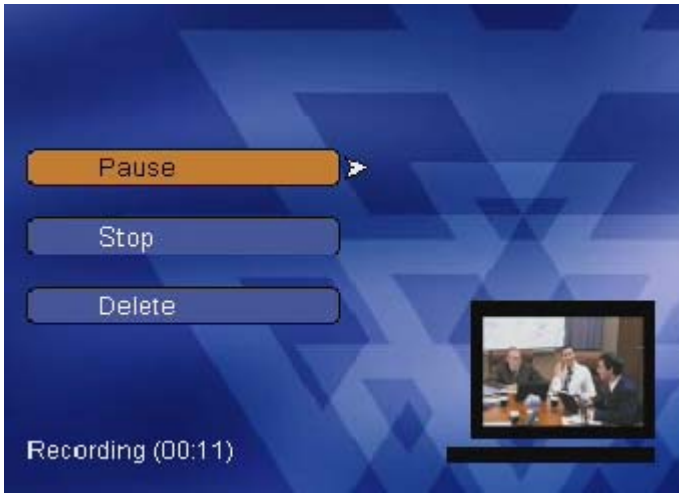


Figure 3-5 Pausing a recording

Deleting Recording

Use the remote control to select **Delete**. The video currently being recorded will be stopped, and all bit stream information being stored will be deleted. The menu will return to the *Start Recording* menu and the user will hear the IVR message "The conference recording has ended".

Stop Recording

Use the remote control to select **Stop** to stop the current recording and generation of a video file. The user will hear the IVR message "The conference recording has ended".

- The RSS 2000's internal storage will reserve 500 MB of storage space. Recording will be stopped and a video file created if the free hard drive space falls to less than 500 MB during a recording.
- When the hard drive has less than 500 MB of available space, an IVR message will tell the user that there is insufficient hard drive space if the user tries to start a recording.
- If no audio/video data is received for 30 consecutive seconds during the recording process, the RSS 2000 will terminate the connection.

Live Streaming

When the **Live streaming** option is selected, the RSS can allow web users to view the bit stream while a non-HD/SD video is being recorded. The RSS will decode the audio/video bit stream sent from the endpoint, and will convert it in real-time to a WMV format that can be played on a PC. The RSS 2000's Web Interface can be used to initiate playback of the video, as shown below. Click on the button on the *Live Streaming* menu to view the video in real-time.

Figure 3-6 *Streaming a video*

Immediate Recording

When an endpoint's immediate recording function has been enabled, the RSS 2000 will automatically start a recording (if recording resources are available) when that endpoint calls into the RSS 2000.. This function ensures that the user of this endpoint will not be prompted with onscreen menus. To enable an immediate recording the user must have Administrator privileges to the RSS 2000. Enter the "Account management -> Endpoints" page of the Web management interface. If the desired endpoint is not in the list, click “New” to add. If the desired endpoint is in the list, click on “modify endpoint properties” and select **Enable immediate recording**, as shown below.

Figure 3-7 *Enable immediate recording*

This functionality is intended to be used in case of connection where the Far End Camera Control or the DTMF are being disabled, which will not allow the user to navigate via the RSS 2000 onscreen menu.

Archive Name Format

Files produced from single point recordings are named using the following rule: Endpoint's H.323 alias + Recording time stamp (Date & Time). For instance, if an endpoint's H.323 alias is kylin-60, and the recording started at 10:45 on July 20, 2007, then the file name will be "kylin-60_JUL_20_2007_10:45", as shown below.

Figure 3-8 *Document naming rule*

Using a Polycom MCU for Single Point Recording

Polycom's MCU (Multipoint Control Unit) line, consisting of the MGC and RMX, can be easily integrated with the RSS 2000. Use the MGC's Recording Link function to initiate a recording connection with the RSS 2000 and record MGC conferences, or add the RSS as a participant in an RMX conference.

Before using an MCU to perform recording, you must first set Recording Link parameters and the address of the RSS 2000 server on the MGC. The MGC will then establish a connection to the desired RSS 2000 when a conference is started. Depending on the MCU's settings, RSS 2000 can support two types of recording methods: Automatically activated conference recordings, or recordings initiated by MCU operators and conference chairperson participants. The RSS 2000 records the audio/video bit streams transmitted by the MCU. It should be noted that when MCUs are used to perform H.239 dual-stream recording, the participating MCUs must support H.239 and that function must be enabled. The RMX supports only H.239, so this is not a concern for recording RMX conferences. Other devices, like the MGC and many Polycom endpoints, support both H.239 and the proprietary People + Content standard. In these cases, ensure that the device has H.239 enabled as the RSS cannot record the proprietary People + Content protocol.

When an MGC/RMX is used to perform a recording, the resulting files will be named according to: the following rule: the MCU's Recorded Conference Name + Recording time stamp (Date & Time), the conference name in the MGC/RMX settings. For instance, if a conference from the MGC/RMX is being recorded and the conference name is set to 'Demo' performs a recording at 11:30 on December 29, 2007, the resulting file will have the name "Demo_DEC_29_2007_11: 30".

Please refer to the product user guide concerning how to set up an MGC/RMX Recording Link.

Point-to-Point Recording

When performing a point-to-point recording, first use the RSS 2000's Web UI to configure a point-to-point conference and set recording parameters by setting up a Recording Room (There are two types of default point-to-point conferences; only one supports H.239 content). The Web UI can be used to establish a maximum of four conferences. Once the Recording Room has been set up, two endpoints can call into that room and will use the remote control to start, pause and stop the conference recording. When only one endpoint enters a conference and begins recording, that endpoint will view its own loopback image. When two endpoints are present in a conference at the same time, each of the endpoints will see two images processed by the RSS 2000. These windows will display images from the two endpoints. Please refer to *Point-to-point Recording Settings* to learn how to configure a point-to-point conference using the Web UI.

Entering a Recording Room

From any H.323 endpoint, call the RSS 2000, the user will arrive at the main menu. Use the remote control to select "Recording room," and enter the recording room interface, as shown below. This will display the recording rooms configured on the RSS 2000.

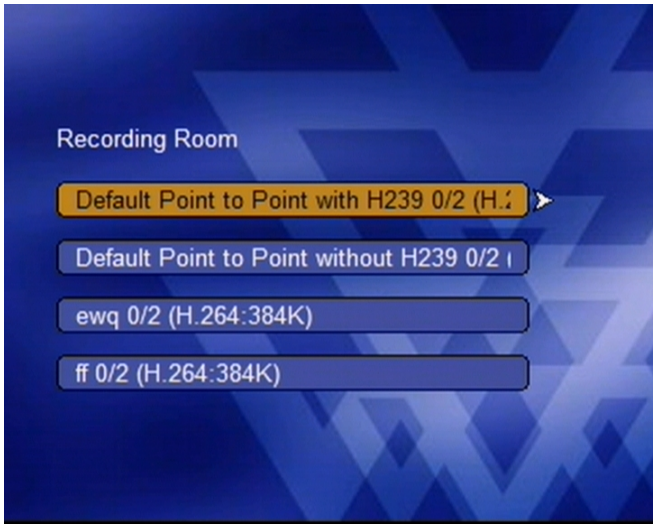

Recording Room
Default Point to Point with H239 0/2 (H.
Default Point to Point without H239 0/2
ewq 0/2 (H.264:384K)
ff 0/2 (H.264:384K)

Figure 3-9 *Configured Recording Rooms*

From the "Recording room" interface, the user can view the names of all the conferences that have been established, the number of endpoints currently connected to each conference, and each conference's configured bandwidth and video protocol. Select the conference to join. When only one endpoint is connected, that endpoint will present loopback image after joining the conference. When a second endpoint joins the conference, both participants will be shown two images processed by RSS 2000, depicting each of the two connected endpoints. Pressing any direction key on an endpoint remote control will display the main Recording Room menu, as shown below.

Figure 3-10 *Start recording menu*

The "Start Recording" option cannot be selected if an endpoint does not support the video algorithm defined for the recording room. For example, if the recording room is configured for H.264 and endpoint that does not support H.264 cannot use the “Start Recording” option for that room.

After selecting "Start Recording" the user will hear the IVR message "Conference Recording has started" and see a volume indicator at the bottom of the screen. If the user presses the "←—" key, they will see either a loopback image or two windows.

Using an E.164 number to immediately enter a recording room

If the RSS is registered to a Gatekeeper, users can quickly access a recording room without using onscreen navigation menus. The user can dial the [RSS 2000 prefix][Recording room prefix] to immediately enter a recording room.

For example, if the RSS is registered to the gatekeeper with an E.164 alias of "1234" and the Recording Room has an alias of "5678", a user registered that gatekeeper (or routing the call through it) can dial "12345678" to enter the Recording Room without onscreen navigation.

If the user wishes to invite another endpoint to join the recording room, a longer dial-string can be used to accomplish this.

[RSS 2000 prefix][Recording room prefix]*[E.164 of endpoints invited to participate]

Building on the example above, if the E.164 alias for RSS 2000 is 1234, the Recording Room alias is 5678, and the endpoint to be invited has E.164 alias 0460, then the user can dial 12345678*0460.

The menu can be used to pause/resume, stop or delete the recording during the point-to-point recording process, and users can also select "Delete" to stop and delete the current recording. These procedures are the same as for single point recording.

Streaming without Recording

If the user wishes to stream the content of a recording room conference without recording, select "Streaming without recording". This is the same as the single point recording streaming function. Specific instructions are given in the section *Live streaming*.

Leaving a Recording Room

Select "Leave the recording room" from the "Recording room" menu. The endpoint will leave the point-to-point conference and return to the main menu.

4

Onscreen User Interface (UI) – Archive Playback

After a video has been recorded, it is stored separately in two formats: as a raw H.323 bit stream (for H.323 playback), and in WMV format (for Web archive view). An H.323 endpoint can play back a video stored as a raw bit stream by calling the RSS 2000.

RSS 2000 can support a maximum of ten simultaneous H.323 playback connections.

Use the endpoint remote control and Far End Camera Control to select "Play Video" on the main menu. This opens the "Play Video" menu, as shown below.

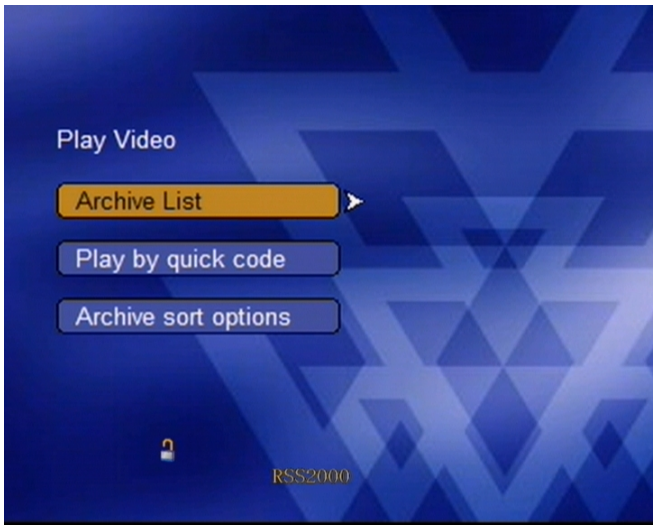


Figure 4-1 *Play Video menu*

Video Viewing Rights

Select "Archive List" from the "Play Video" menu. This opens the interface shown in Figure 4-2, which displays a list of the videos that the endpoint can view.

When the "Viewing rights" option of archive is set to "Allow all," or if set to "Group list" and the connected endpoint is a member of that group, the video will be included in the available "Play Video" list. Please see *Viewing rights settings* for more information on video viewing rights. If the RSS 2000 has clustering enabled, the Archive List will show recording files stored on other devices in the cluster. Please see *Clustering settings* for more information on clustering.

Use the remote control to select the desired video from the Archive List. Information concerning the highlighted video file will be displayed below the list, including the video protocol, quick access code, and name of the device storing the file. If the video can be previewed, you will see a preview of the video highlighted by the cursor in the small preview window in the lower right corner of the screen.

Figure 4-2 *Video information and preview*

Videos on the RSS 2000 Archive List can be previewed if they meet the following four conditions:

- The archives were recorded in resolution lower than SD (Standard Definition).
- The video file is stored on an RSS 2000 the endpoint is connected to.
- The video file preview function has been enabled in the RSS 2000 settings. Please refer to *System settings* concerning the preview function.
- The highlighted file's video algorithm is supported on the endpoint.
- The number of current H.323 connections does not exceed 2.

Highlight a video and select it; the chosen video will be played back. When playing back, the user can use the "*3" or any FECC arrow buttons on the remote control to stop playing.

After an endpoint calls an RSS 2000 and makes a connection, videos will be listed for playback only when the endpoint has viewing rights and its video algorithm supports the video. If the endpoint does not support the video algorithm, a video will not be shown on the Archive List even if the endpoint has viewing rights.

Quick Access Codes for Archive Playback

The user can use the quick access code to retrieve a recording file stored on a device. The system automatically generates a quick access code for each file after ending a recording. Users can find a file's quick access code among the file properties on the Archives page of the system management web site, as shown below.

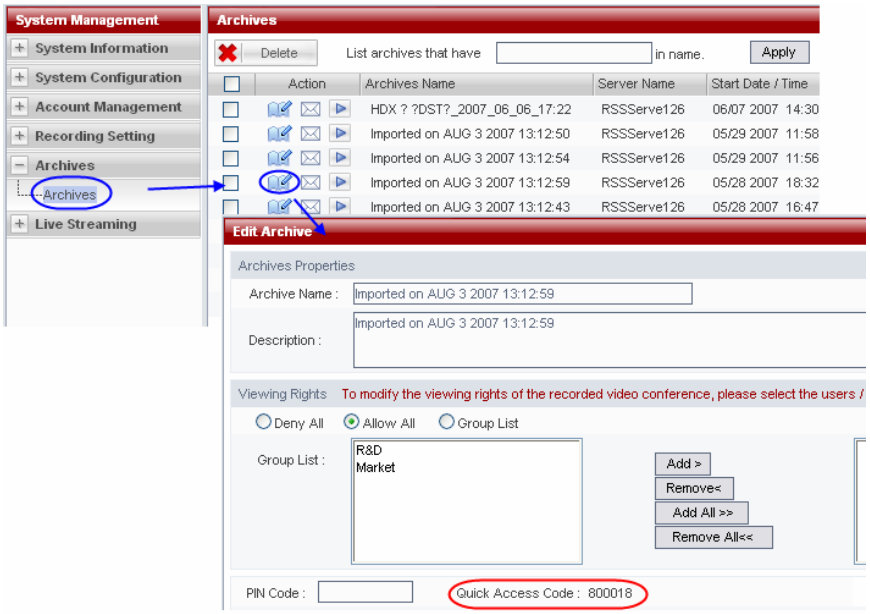


Figure 4-3 *Viewing a file's quick access code*

Quick play using the H.323 menu

Use the remote control to select "Play by quick code" on the "Video Playback" menu, and confirm. This will open the quick access code play interface, as shown below.

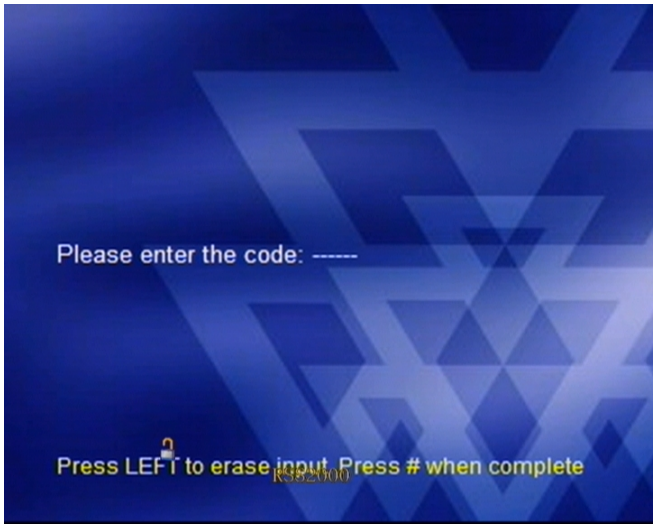


Figure 4-4 *Enter the quick access code*

Use the remote control's number keypad to input a file's quick access code, and press "#" when finished.

If a PIN code has been set for a recording file, the system will prompt the user to enter the PIN code after the quick access code has been input.

If no PIN code has been set, the system will immediately begin to play back the file after the quick access code has been entered.

Quick play (with RSS 2000 registered to a gatekeeper)

If an endpoint has viewing rights for a video, a user can use the remote control's number keypad to input the RSS 2000's E.164 alias + the video's quick access code to immediately play the file without needing to browse the menu. For example, if the RSS E.164 alias is 1234, and the desired video file's quick code is 567890, the user could dial 1234567890 to view the video without navigating through menus.

Quick play (with RSS 2000 not registered to a gatekeeper)

Call the RSS 2000's IP address and input the quick access code in the endpoint's extension field (the endpoint must support the extension number field) to view the video file without navigating through menus.

When playing back a video, press "*3" to stop playback.

Sorting Archives

The RSS 2000 provides Archive List sorting functions in order to help users find desired videos in the archives. Use the remote control to select "Archive sort options" on the "Video Playback" menu, and confirm to enter the archive sorting interface, as shown below.

Figure 4-5 *Archive sort options*

Sorting rules that can be set in this interface include: Sorting by video creation time, sorting by the video's duration, sorting by the video's name, sorting by the name of the RSS (server) on which the video file is stored, and sorting by the video format.

The symbol "*" in the interface indicates the archive list's currently selected sorting rule. Use the remote control select any sorting rule, and confirm to sort the archive using the selected rule. For details of sorting rule please see below table.

Table 4-1 *Sorting Rules*

Sorting Type	Description
Sort by Date/Time	The newest archive will appear first in the archive list (Default).
Sort by Duration	The longest archive will appear first in the archive list.
Sort by Archive Name	In alphabetic order based on the archive name.
Sort by Server name	Used in Clustering mode – based on the RSS where the archive is located on.
Sort by Video Format	Archives will be sorted from HD to QCIF format.

PIN Codes

After the remote control is used to select a video listed on the "Video Playback" interface, the chosen video will be played. If a PIN code has been set for a video, the RSS 2000 will give a voice prompt asking the user to enter the video's PIN code. When DTMF tones are used to enter the video's PIN code, the entered number will be shown marked with an "*" on the menu interface. Press "#" after completing PIN code entry (enter a maximum of 8 numbers; users do not have to press "#" if 8 digits have been entered). If the PIN code has been entered correctly, the video will immediately begin playback. If the PIN code has been entered incorrectly, the RSS 2000 will play the voice prompt "Invalid personal code please try again".

Fast Forward/Reverse/Stop

When playing back a video, viewers can use the remote control to operate the fast forward/reverse/stop functions. The RSS 2000 utilizes the following DTMF tones as convenient video play functions.

Table 4-2 Description of DTMF key functions

DTMF key	Description
*1	Resumes the paused video.
*2	Resumes a paused video.
*3	Stops playback of the current video and returns to the main menu.
*4	Reverses the current video. Reverse will stop at the previous I-frame. The Web UI can be used to set the interval between I-frames. The RSS 2000 has a default interval between I-frames of one minute; the interval can be set as 1-10 minutes.
*6	Fast forwards the current video. Fast forward will stop at the next I-frame. The Web UI can be used to set the interval between I-frames. The RSS 2000 has a default interval between I-frames of one minute; the interval can be set from 1-10 minutes.
0-9	Quickly jumps through video playback, from 0% to 90% play time positions); after jumping, the video will start to play from the nearest I-frame. For example, the DTMF tone 7 will jump 70% of the way through the video file.

Choose Language for Endpoint Menu

Use the remote control to select "Change Language" on the main menu interface, and confirm to enter the menu language selection interface, as shown below.

Figure 4-6 Changing the menu language

The RSS 2000 current supports the endpoint menu with 12 languages, including simple/traditional Chinese, English, Japanese, Korean, Russian,

Italian, German, French, Spanish, Portuguese and Norwegian. Use the remote control to select the desired language. The interface will jump back to the main menu after a language selection has been made, and the selected language will be the set language.

5

Appendix A – Terminal Setting and User Commands

The RSS 2000 supports command settings for the configuration of equipment and troubleshooting. There are two ways of using commands to configure settings: one is to connect to the RSS 2000's serial port and use an emulation program like Hyperterminal; the other is to use telnet. The format of commands is the same in both cases. The following explains how to use commands to perform settings with hyperterminal commands only, but the commands in telnet work the same way.

Hyperterminal Parameters

- Port: COM1 (confirm on the basis of the port used on the PC)
- Baud rate: 9600 bps
- Data: 8
- Parity: none
- Stop bit: 1

The following additional parameters may need to be set if required by the emulation software:

- Echo off for local input
- DEL key and Backspace key settings
- Carriage return/line feed
- Endpoint emulation types are "automatic" and "ANSI"

Logging in

After completing the above settings and successfully enabling the endpoint emulation software, press the Carriage Return/Enter key to enter the login interface.

The login interface displays various types of information about the software and prompts the user to enter the login password. Please enter the login password and press **Enter**.

- The preset default login password is “polycom."
- After forgetting the login password, a user can use emulation software to connect to the serial port, and then reset the RSS 2000. When “…” is displayed on the emulation software, press "CTRL+C," and the user will be able to login to the system without entering the password. The user can now use appropriate commands to change the user login password.

If the password entered is incorrect, the system will ask the user to login again.

If the password is correct, the following software user interface will appear:

```
************************************************************
**                                                        **
**      Welcome to Polycom RSS 2000 Server                **
**                                                        **
**     Polycom RSS 2000 System Information                **
**                                                        **
**  Polycom RSS 2000 Version 1.0.0.006 Build:Jun 19 2006  **
**                                                        **
**                                                        **
**                                                        **
************************************************************

 Physical Memory:1039836 KB    Intel(R) Pentium(R) 4 CPU 2.80GHz

 LAN1:   IP: 172.21.99.43  MASK: 255.255.224.0
        GW: 172.21.99.1  MAC:  00:90:FB:06:A0:80

 RSS 2000 Service is RUNNING

#
```

Figure 5-1 User interface

Overview of Commands

Help

After the user have logged onto the system, enter "?" or "help" after the "#" to show the following information:

```
#?
Available comands:
show Show system information.
reset password Reset the administrator's password to default.
set lan1 static <ip address> netmask <ip mask> [gw <gateway
```

```
address>]
Config LAN1 IP address.
reboot Restart system.
help or ? Show this message.
quit Logout.
#
```

Logout

Enter "quit" after the prompt "#" and press Enter to logout.

```
# quit

User logout ok.

Please input your password:
```

System reset

Enter "reboot" after the prompt "#" and press Enter to automatically restart the system.

```
# reboot

System is restarting now....
# ..........................................
```

Reset login password

Enter “reset password" after the prompt "#" and press Enter to reset the current password to the default password (polycom), allowing the user to reset the login password.

```
# reset password

Password has been successfully reset.

Available commands:

show Show system information.

reset password Reset the administrator's password to default.

set lan1 static <ip address> netmask <ip mask> [gw <gateway
address>]

Config LAN1 IP address.

reboot Restart system.

help or ? Show this message.
```

```
quit Logout.


#
```

Show system information

Enter “show" after the prompt "#" and press Enter to display system information:

```
# show

Physical Memory:1039836 KB Intel(R) Pentium(R) 4 CPU 2.80GHz

LAN1: IP: 172.21.99.43 MASK: 255.255.224.0

GW: 172.21.99.1 MAC: 00:90:FB:06:A0:80

RSS 2000 Service is RUNNING
```

Telnet settings

Enter "telnet on" or "telnet off" after the prompt "#" and press Enter to enable or disable Telnet.

Entering "telnet off" disables the RSS 2000's telnet function. The user can now only use the serial port to perform system setting tasks.

```
#  telnet on

Set Telnet ON ok
```

Entering "telnet off" disables the RSS 2000's telnet function. The user can now only use the serial port to perform system setting tasks.

```
#  telnet off

Set Telnet OFF ok
```

FTP settings

Enter "ftp on" or "ftp off" after the prompt "#" and press Enter to enable or disable the FTP function.

Entering "ftp on" enables the RSS 2000's FTP functions. Those users defined on the RSS 2000 can now use the FTP protocol to download video files on the device.

```
#  ftp on

Ftp service enabled. You need restart media service to make it
valid.
```

Entering "ftp off" disables the FTP function.

```
#  ftp off

Ftp service disabled. You need restart media service to make it
invalid.
```

ClearArchives

This command is used to delete all video files on the RSS 2000. Enter "ClearArchives" after the prompt "#" and press Return to implement this

operation.

```
#  ClearArchives

Please input administrator's password to continue:
```

Enter the correct administrator password after the prompt and press Enter; the system will start to delete all video files on the RSS 2000. The following information will be shown after all files have been successfully deleted:

```
Clear all archives command send out OK.
```

Imageversion

This command is used to view the version information of current image file. Input imageversion after the prompt "#" and press Enter button to implement this operation.

```
#  imageversion

Current image version(0):
```

ResetConfig

Enter "ResetConfig" after the prompt "#" and press Enter to restore the RSS 2000's default configuration. Please enter the administrator password now.

```
#  ResetConfig

Please input administrator's password to continue:
```

Enter the correct administrator password after the prompt ":" and press Enter. The RSS 2000 will begin resetting.

```
Prepare to reset configurations...

Resetting configurations now...

Reset configurations OK.
```

The RSS 2000 must be restarted in order for the new settings to take effect. The RSS 2000 will now be restored to the default configuration. The IP address will be: 192.168.1.254, the subnet mask: 255.255.255.0, and the gateway: 192.168.1.1.

The user can now use the serial port to set the RSS 2000's IP address.

6

Appendix B - RSS 2000 Media Tools

This section introduces three software tools used exclusively on the RSS 2000: RSS 2000 Multicast Player, RSS 2000ArchiveConverter, and RSS 2000 Upload; these tools have the following functions:

- RSS 2000 Multicast Player: Used exclusively to receive multimedia sent by the RSS 2000.
- RSS 2000 Archive Converter: Used to convert the format of raw bit streams from RSS 2000 video recordings.
- RSS 2000 Upload: Used to upload video code converted by the RSS 2000 Archive Converter to the RSS 2000.

Accessing and Installing RSS 2000 Media Tools

To install the RSS 2000 Archive Converter and RSS 2000 Upload tools, enter the System Settings-> System Upgrade/Restart screen using the Web UI, click on the "Click here to download" link to download the media tool pack. Follow the on-screen instructions to complete software installation. Following successful installation, the RSS 2000 Archive Converter and RSS 2000 Upload tools will be installed on your PC.

If the user purchases the multicast module when purchasing the RSS 2000, he can find the installation file RSS 2000 Multicast Player.exe among the files on the DVD. Double-click on this file and follow the on-screen instructions to complete software installation.

Shortcuts to the installation programs for these tools can be found on the Start -> Programs -> polycom menu. Single-click on the shortcuts to open these software tools.

Uninstalling RSS 2000 Media Tools

Either of the following two methods can be used to uninstall the RSS 2000's media tools:

- Open the Control Panel and click on "Add or Remove Programs". Select "Media Tools" from the list of programs, and click on the Remove button to uninstall either the RSS 2000 Archive Converter or RSS 2000 Upload. To uninstall the Multicast Player, select the program "RSS 2000 Multicast Player" from the list of programs, and then click on remove.
- Click on the uninstall shortcuts for any of the programs from the Start -> Programs -> Polycom menu to immediately uninstall the software.

Operating Environment

The operating environment for the three RSS 2000 software tools must satisfy the following requirements:

- CPU: at least 1.5GHz or high-resolution 2G
- Memory: at least 512M
- Video Card: at least 32M
- Operating System: at least Windows 2000/XP/Vista

The user's PC must have at least 1G memory if he use the RSS 2000 Archive Converter to convert the format of a high-definition video bit stream.

Using RSS 2000 Multicast Player

Before the user use the RSS 2000 Multicast Player to receive multicasts, please

make sure that the RSS 2000 device on the network is multicasting and set the firewall on your PC to allow multicasts.

Click on Start -> Programs -> Polycom -> RSS 2000 Multicast Player -> RSS 2000 Multicast Player to use this tool. The software will open two windows: the media play window and the multicast file list operating window, as shown below.

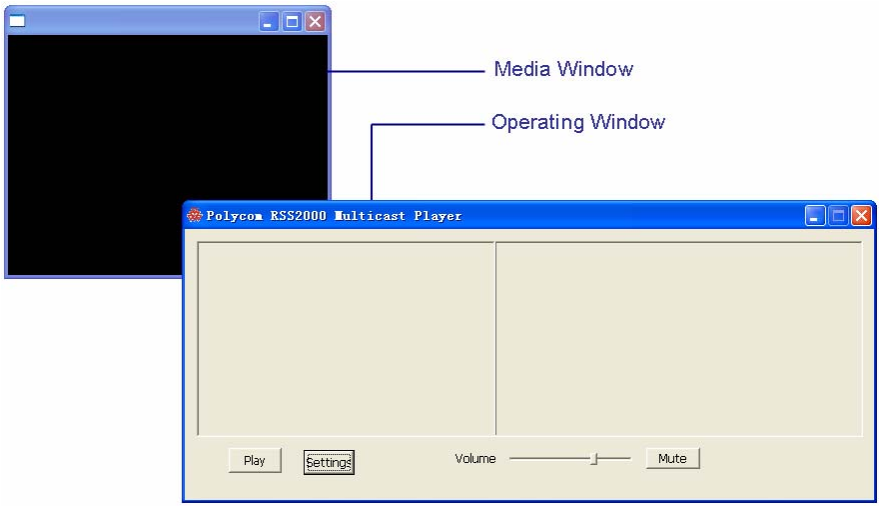


Figure 6-1 Multicast Player

Receiving Multicast Videos

Click on the "Settings" button in the multicast operating window to change the RSS 2000 Multicast Player's settings, as shown below.

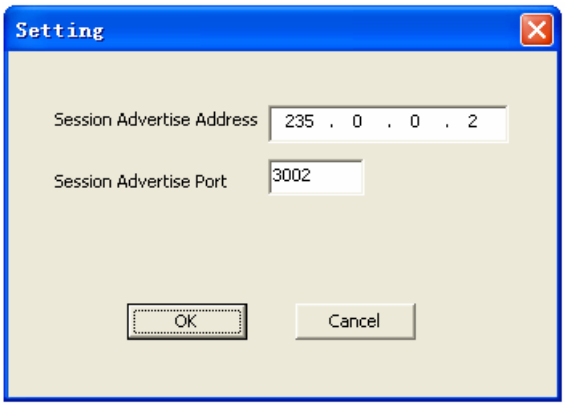


Figure 6-2 Setting

The user must set the following two options in this interface:

- **Session Advertisement Address:** Configure the IP address for receiving the multicast file list. This address must be the same as the RSS 2000's session announcement address.
- **Session Advertisement Port:** Configure the port number for receiving the multicast file list. This port number must be the same as the RSS 2000's "session announcement port."

Click on the "OK" button after completing settings. The RSS 2000 Multicast Player will now begin receiving videos from the specified multicast channels within 45 seconds. A list of received multicast videos will be shown in the

multicast operating window, as shown below.

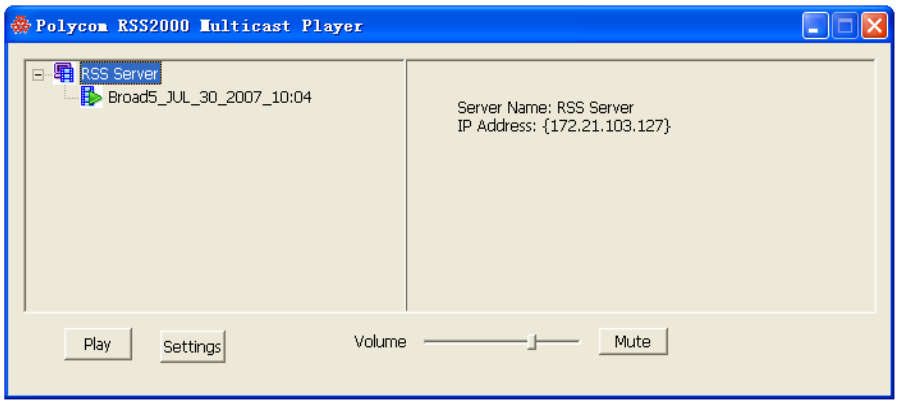


Figure 6-3 List of received video files

Playing Multicast Videos

Use the mouse to select a video from the list shown in Figure 6-3, and single-click the "Play" button to play the selected video, as shown below.

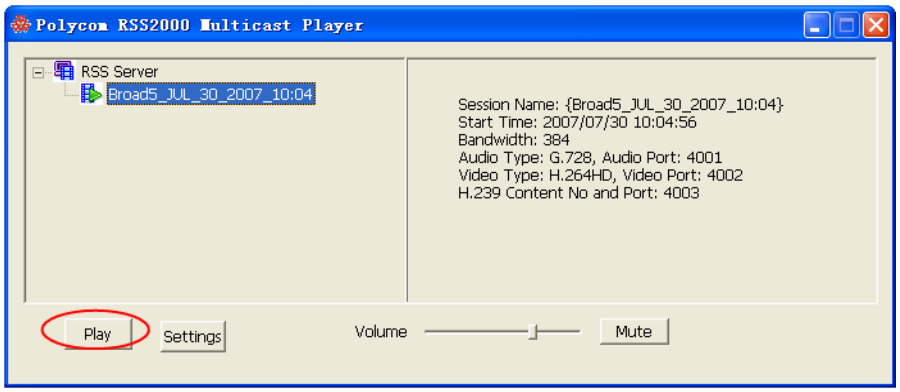


Figure 6-4 Playing a video file

The user can also double-click on a video in the list to play that video.

Click on the "Stop" button to stop playing a video, as shown below.

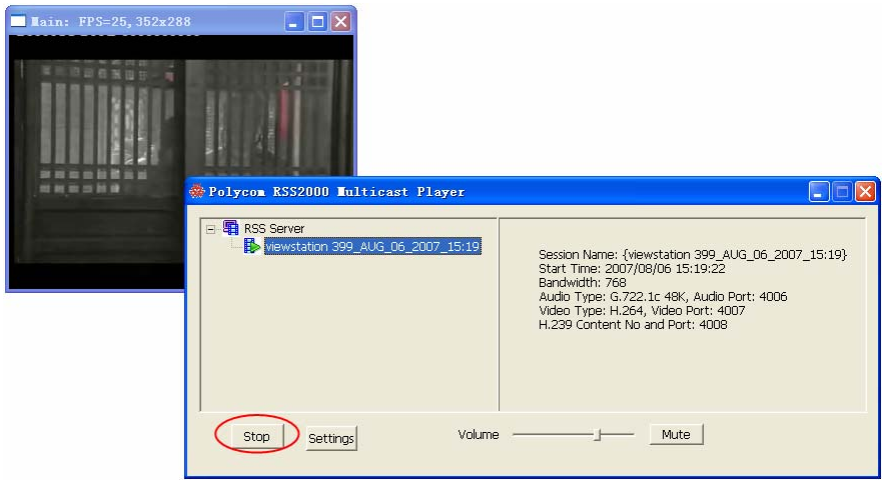


Figure 6-5 Stop an archive

When selecting a device or a video using the mouse, detailed information concerning the selected device or video will be shown on the right side of the window.

Because the software requires some time to acquire the I-frame of the video stream, there will be a slight delay between clicking on the "Play" button, or double-clicking on a video, to the time the video actually starts playing.

Adjusting Video Window Size

Press the right mouse button while viewing the media play window; the user will see the setting options.

Figure 6-6 Adjusting window size

- Select "Size 1x" to revert to the window's original size.
- Select "Size 2x" to enlarge the window to twice its original size.
- Select "Full Screen" to show a video on the full screen

The user can also double-click on the media window to view a multicast video on the full screen, or move the mouse pointer until it reaches an edge of the window; when the adjustment symbol appears, drag with the mouse to expand or shrink the window to any desired size.

Video Statistics

The user can view statistical information concerning a multicast video that is currently being received. Select "Statistics" among the options shown in Figure 6-6, and the user will see the statistical information shown in Figure 6-7, including the frame rate and video size.

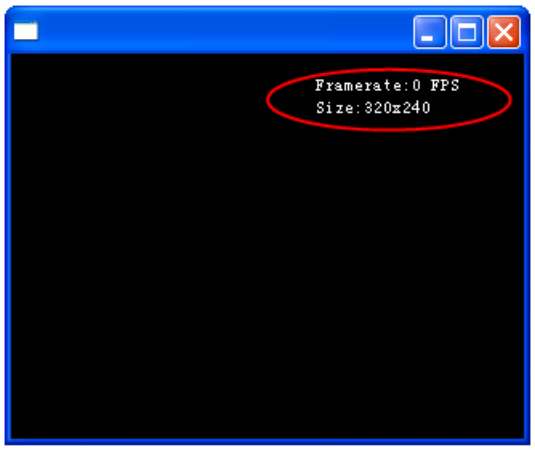


Figure 6-7 Statistical information

Using RSS 2000 Archive Converter

Format conversion

The RSS 2000 Archive Converter can be used to convert the format of video bit streams in two ways:

Conversion between source code types:

This type of conversion is used only to convert the video format and bandwidth of a bit stream.

When video is recorded in a high-resolution format or using high bandwidth, it may not be possible to play the recorded video normally on an ordinary endpoint. The user may, however, use the bit stream conversion tool to change the format and bandwidth of the bit stream, and enable it to be played by other endpoints. The converted bit stream files can only be used by the RSS 2000. Use the file upload tool—RSS 2000 Upload—to upload the files back to the RSS 2000. Please see *Using RSS 2000Upload* for an overview of the file upload tool.

Conversion to MP4 format:

Converts to a format that can be directly played on an IPod or by QuickTime.

RSS 2000 Archive Converter is for changing algorithms (H.264 to H.263, etc) but does not support .asf to .wmv conversion.

Starting file conversion

Use the following steps to begin file conversion:

1 Click sequentially on Start -> Programs -> Polycom -> Media Tools -> RSS 2000 Archive Converter to us the RSS 2000 Archive Converter. The interface will be as shown below.

Figure 6-8 Open Archive

2 Click on the "Browse File" button and select the bit stream file the user wish to convert.

If the user wish to view information concerning the file, click on the "Detail" button to call up the interface shown below.

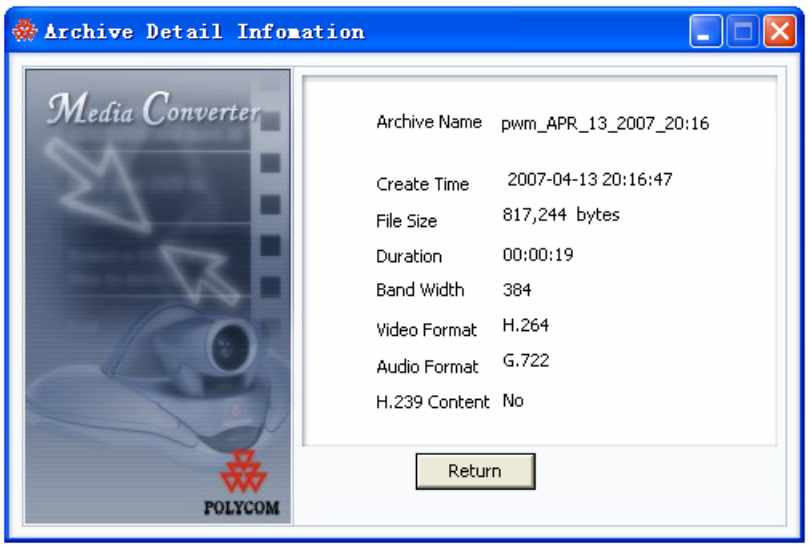


Figure 6-9 Video file details

3 In the interface shown in Figure 6-8, click on the "Next" button to enter the conversion type interface.

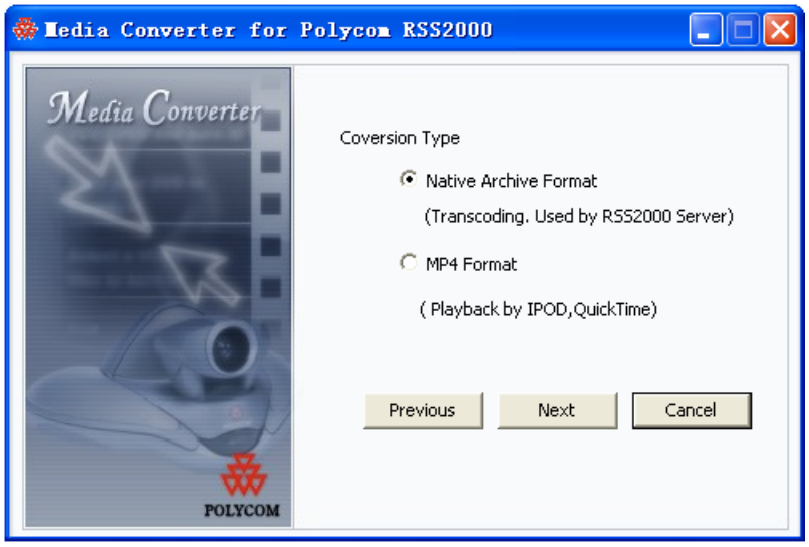


Figure 6-10 Conversion type

4 Select a file conversion type: Native Archive Format or MP4 Format.

5 After selecting, click on the "Next" button to enter the other conversion option interface.

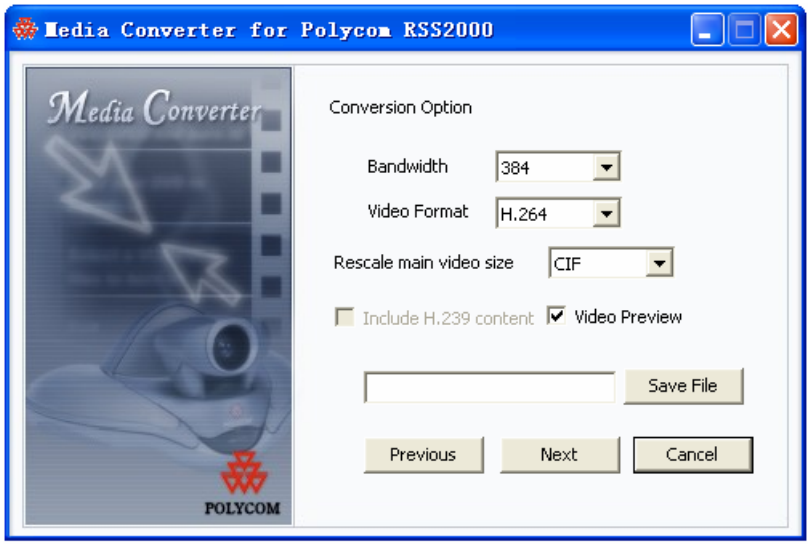


Figure 6-11 Conversion option

The user can set the following options in this interface:

- **Bandwidth:** Sets conversion bandwidth
- **Video Format:** Sets the video algorithm. This option can be used only when converting between raw bit stream formats.
- **Rescale main video size:** Sets the video format after conversion; can be set as CIF, SIF, 4CIF, or 4SIF. This option can be used only when converting between raw bit stream formats.
- **Include H.239 content:** This option is enabled when the recording bit stream includes H.239 dual stream video. Checking this option will cause the second video channel to be converted. The second video channel will not be converted if this option is not checked.

— **Video Preview:** Sets whether a video preview will be shown by the conversion tool during the conversion process. A preview is shown when this box is checked, but not permitted when this box is unchecked.

6 Click on the "Save File" button and set the save path and filename after conversion.

7 Click on the "Save File" button and set the save path and filename after conversion Figure 6-12 will appear.

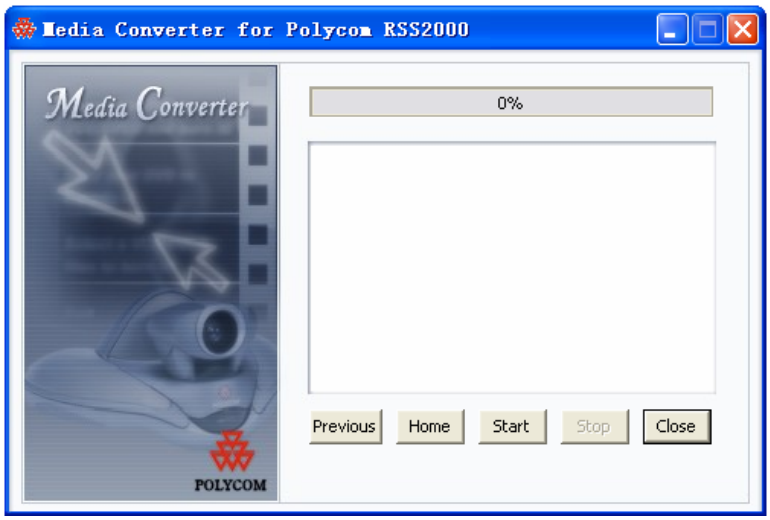


Figure 6-12 Preparing to convert

8 In this interface, click on the "Previous" button to return to the previous screen; click on the "Home" button to return to the initial setting screen; or click on the "Start" button to begin conversion. After conversion begins, the progress bar at the top of the screen will show file conversion progress. If "Video Preview" was checked in Figure 6-11, a preview of the video is displayed in the space under the progress bar, as shown in below.

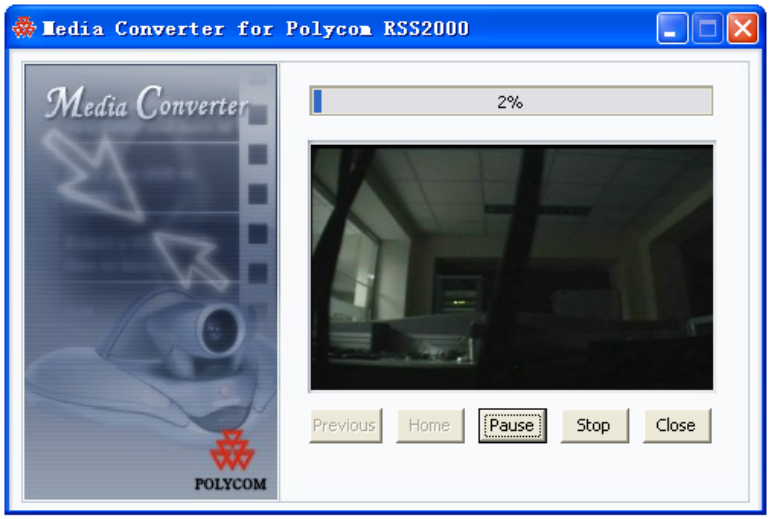


Figure 6-13 Video previe

A preview will not be shown if "Video Preview" is unchecked.

Clicking on the "Pause" button at any time during the conversion process

will pause file conversion. Clicking on the "Resume" button will then resume video conversion. Clicking on the "Stop" button will cause a confirmation dialog box to pop up; clicking on "OK" will stop the current conversion, and clicking on "Cancel" will enable the conversion to continue.

9 After completing conversion, click on the "Close" button to close the RSS 2000 Archive Converter tool. The user can now find the converted video file in the preset save directory.

Using RSS 2000 Upload

The file upload tool—RSS 2000 Upload—is used to upload video code converted by the RSS 2000 Archive Converter back to the RSS 2000. Newly uploaded video files have the same names as the original, unconverted video file; for instance, if the original video file had the name "123456," the newly uploaded video file will also be named "123456".

Overview of Interface Areas

Click sequentially on the Start -> Programs -> Polycom -> Media Tools -> RSS 2000 Upload to use RSS 2000 Upload. The interface will now be as shown below.

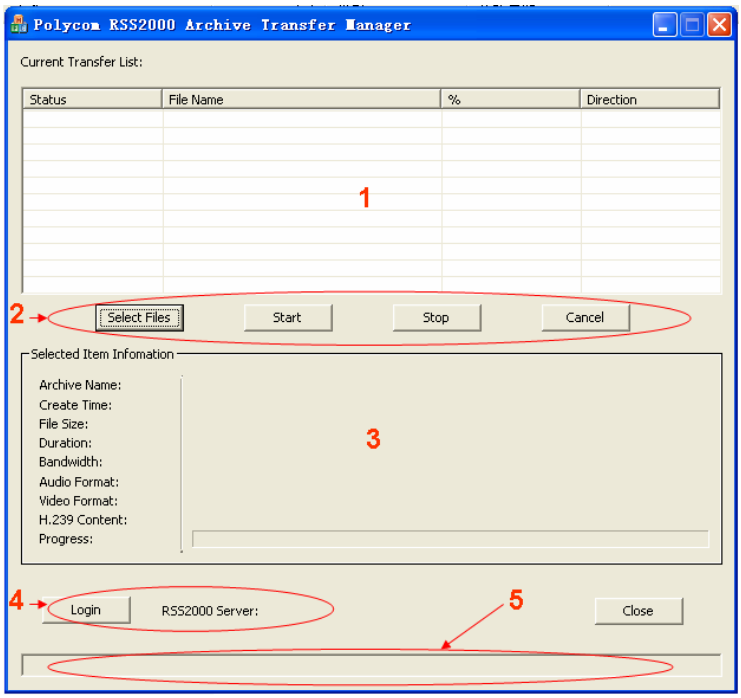


Figure 6-14 RSS 2000Upload Software interface

Figure 6-14 shows five numbered functional areas of the RSS 2000 Upload software interface:

- **Area 1 (Current Transfer List)** displays a list of bit stream files to be uploaded to the RSS 2000. Information shown in this list includes: Status, File Name, %, and Direction. Status indicates the file's upload status, which may be "pending," "transferring," "pause," "stop," "canceled," or "done." File

Name shows the file's full pathname on the current computer. % shows the percentage of the file uploaded; 100% will be shown after the file has been successfully uploaded. Direction shows the file transfer direction; "upload" will be shown in this spot. If the user wish to delete any file in this list, he can use the mouse to select the file, and press the "Delete" key on the keyboard; he can also highlight the file, press the right mouse button, and click on "Delete." Deletion of multiple files is permitted.

- **Area 2** contains functions for controlling file upload. The function of each button will be described in detail below.
- **Area 3 (Selected Item Information)** displays detailed information about each file to be uploaded. Selecting one of the files listed in Area 1 will show information about that file in this area, as shown below.

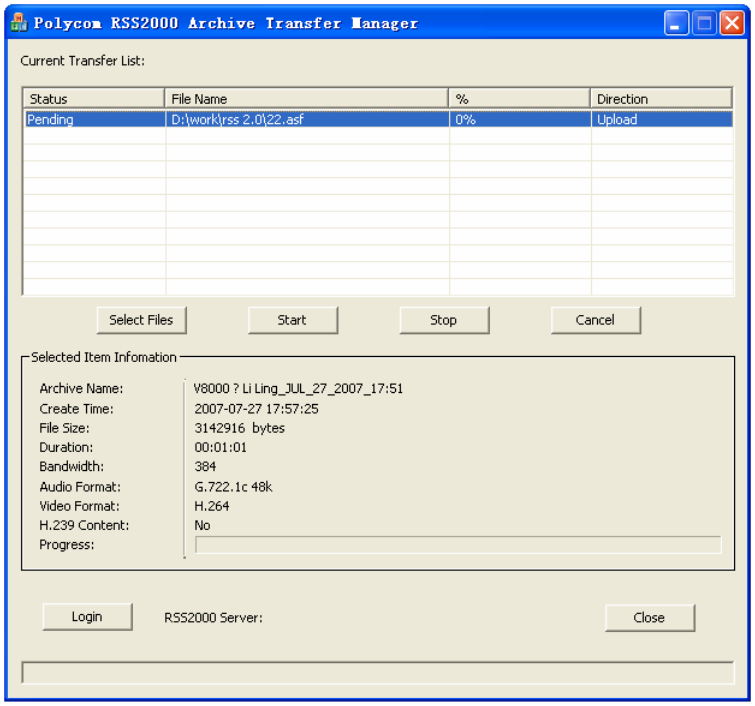


Figure 6-15 Video file information

- **Area 4** is used to login to the RSS 2000 server. Clicking on "Login" will cause the login screen shown Figure 6-16 to pop up.

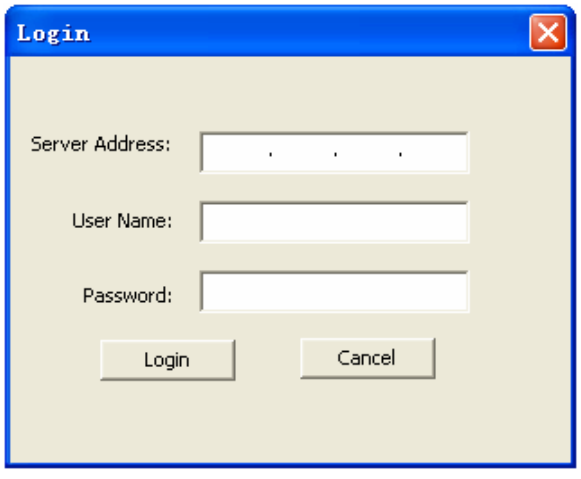


Figure 6-16 Login dialog box

Enter the IP address, administrator name, and password of the RSS 2000 the user wish to connect to, and click on "Login" button to login to the RSS 2000. After successful login, the IP address of the RSS 2000 will be shown after "RSS 2000:" in Area 4, as shown in Figure 6-17. The files will now be uploaded to the RSS 2000. If login has failed, failure information will be shown in Area 5.

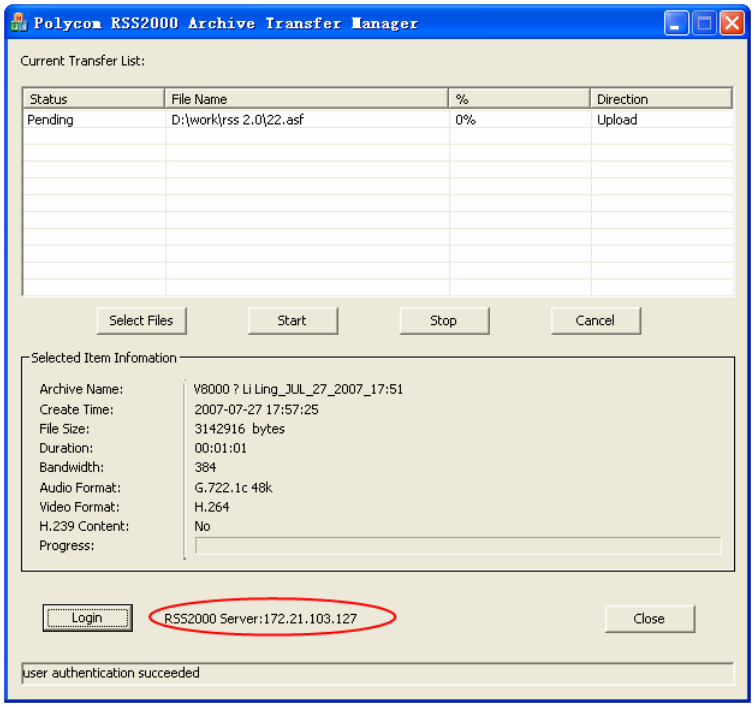


Figure 6-17 Successful login

- **Area 5** shows all system reminders and information during the upload process.

Starting File Upload

Use the following steps to upload files:

1. Click on the "Select File" and select bit stream files that you wish to upload. You can select multiple files. The software will show an incorrect format message if the format is not suitable for uploading.
2. Click on the "Start" button to begin file upload. If you have not logged into an RSS 2000 before uploading files, an RSS 2000 login screen will now pop up. Correctly fill out login information—the uploads will begin after successfully logging in. If the "Login" button in Area 4 has already been used to login to an RSS 2000, click on the "Start" button and file upload will begin immediately.
3. If there are multiple files on the list of files to be uploaded, the system will upload the files in sequence.
4. After files have been successfully uploaded, the file status will show "Done". You can click on the "Close" button to close the program after all files have been uploaded, or can also select more files to upload.

The same bit stream file can be uploaded only once.

Pausing File Upload

You can click on the "Pause" button when files are being uploaded to temporarily pause the upload process; the "Pause" button will now appear as "Resume."

Click on the "Resume" button to cancel the pause and resume the upload.

Stopping File Upload

You can click on the "Stop" button when files are being uploaded to stop the current upload.

The system will save the already-uploaded portion of the file after a file upload has been stopped. When the upload is restarted, the system will only upload the part of the file not uploaded on the previous occasion.

Cancelling File Upload

You can click on the "Cancel" button to cancel the current file upload.

The system will delete the already-uploaded portion of the file after a file upload has been cancelled. The system will restart if the file is uploaded again.